



ELIAS SILOS ON A MODERN DAIRY FARM



## THE ELIAS SILO

IS THE SILO YOU WILL EVENTUALLY BUY TO GET THE BEST RESULTS. HALF YOUR LABOR WASTED OPERATING A FARM WITHOUT A SILO



## G. ELIAS & BRO. Inc.

## BUFFALO, N. Y.

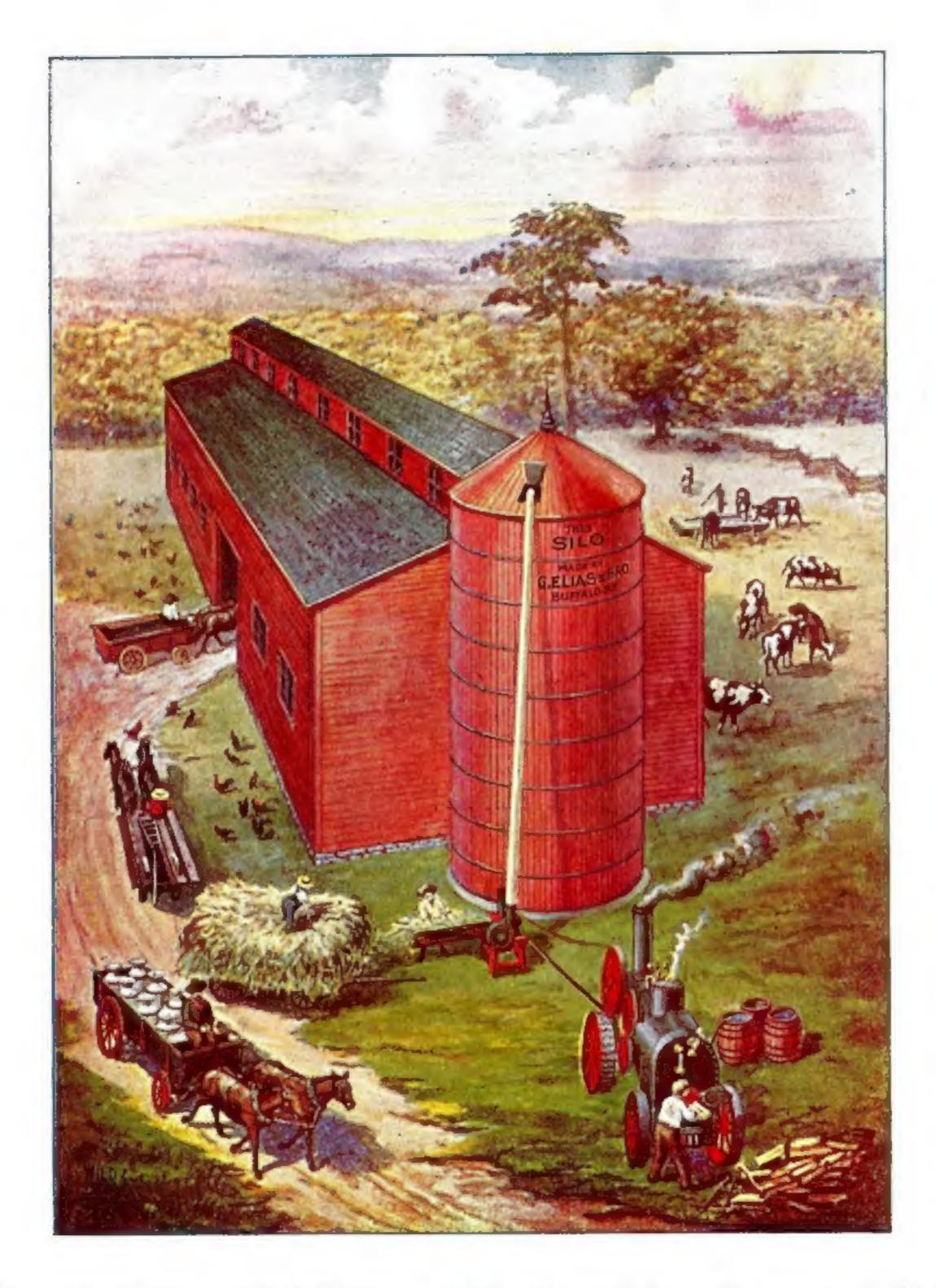
THE
SILO AND
ITS
USES.

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View of our up-to-date Silo being filled.

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You should be one of the winners with one of our Silos.



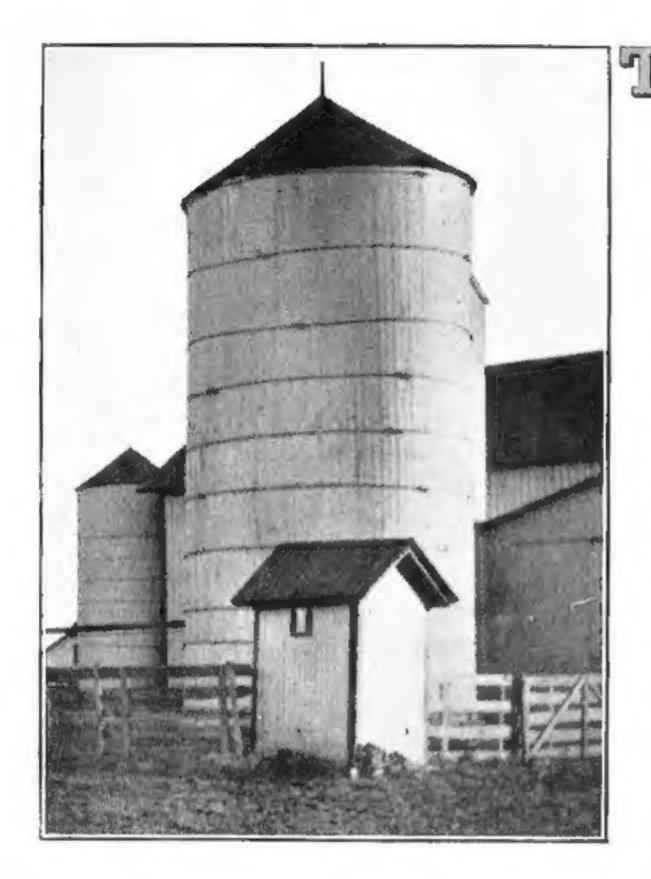
Some Facts
regarding
an
investment
that brings
returns for
every
Farmer.

xxx

Read herein
what
our customers
the Farmers
have to say
about our Silos.

Our Silos stand up and deliver, while others blow down and disappear.

# If you have no Silo on your farm, you are not aware of their value. Read this brief Statement of Fact, and decide whether you want to continue to waste half of your Labor and Crops or Save it.



TWENTY years ago it would have been necessary in writing about Silos and Silage to start out by telling what a Silo is, and what ensilage is good for. To-day there is not any need of taking up much space in preliminaries such as that. Every farmer who takes an agricultural or daily paper, or who reads the farm literature of the large weeklies, knows as well as can be, that a Silo is a special

building—call it tank or pit, or what you like—which is filled with green fodder in the Fall, and this is fed out as silage during the Winter months to all kinds of stock, but particularly to cattle and sheep. He knows also, if he has read the signs of the times carefully, that THE SILO IS GETTING TO BE A NECESSITY ON ALL FARMS, AND THAT IT IS ONLY A QUESTION OF TIME WHEN HE WILL HAVE TO HAVE ONE HIMSELF. A New York State farmer wrote recently in one of our main agricultural papers: "I WOULD AS SOON TRY TO FARM WITHOUT A BARN AS WITHOUT A SILO." and another wrote: "I WOULD'NT TAKE \$1,000 FOR MY SILO if I could not replace it."

That is the experience of thousands of farmers in all parts of our country to-day. In 1882 the United States Department of Agriculture could find only ninety-one farmers who owned Silos in the U. S. At the present time the number, according to careful estimation, has certainly reached a quarter of a million, and some put it at 500,000.

There must be some reasons for the wonderfully rapid distribution of the Silo, and we shall tell in this catalogue what these reasons are, and shall show that SUCCESSFUL, UP-TO-DATE, DAIRY OR STOCK FARMING IS WELL NIGH IMPOSSIBLE WITHOUT THE AID OF A SILO. The Silo enables us to feed farm stock succulent feeds the year around and preserves the fodder in a better condition and with less waste than any



Silos at Gowanda State Hospital. Erected 1902. Photo taken 1914.

other system can. We shall see the why and wherefore

of this in these pages, and shall deal with the best way of making and feeding silage to farm animals. We like to say at the outset that WE DO NOT PROPOSE TO INDULGE IN UNWARRANTED STATEMENTS, OR CLAIMS THAT WILL NOT STAND THE CLOSEST

INVESTIGA-TION. In discussing the Silo, we shall keep close to what has been found out at our State experiment stations, and we believe, shall be able to prove to any fairminded reader that THE SILO IS THE GREATEST BOON TO MOD-ERN AGRI-CULTURE that has come to us since the first reaper was manufactured, and with the sharp competition and resulting low prices, it will in the future become more and more of



Silo of L. A. Stafford, Homer, N. Y. Photo taken May 1914. Erected 1911.

a necessity to our farmers, and particularly to dairy farmers. In the last few years Stave Silos, "The Poor Man's Silo," have been placed on the market, and, as we shall see, any farmer can now easily, quickly, and at a low cost, get a Silo, and make and feed silage to his stock.

## Why Silos Have Become General.

One of the main reasons for the general adoption of the Silo is found in the fact that it enables you to preserve almost any green FODDER FOR FEEDING PURPOSES

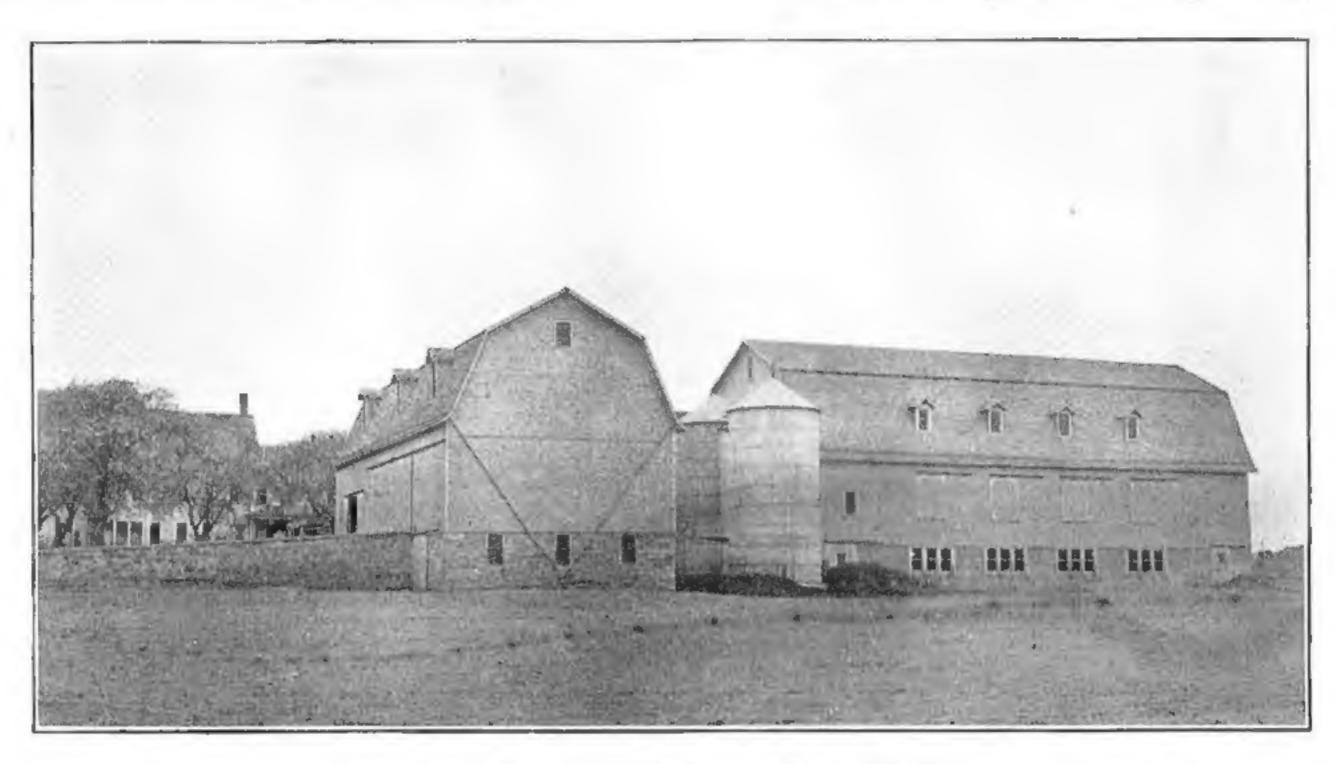
> WITH LESS WASTE THAN POSSIBLE BY OTHER SYSTEMS OF FOOD PREPA-RATION. The difference between hay put in the mow in July and that taken out in April is apparent to all farmers; so is the fact that shock CORN LEFT IN THE FIELD THE WINTER OVER is HARD-LY FIT FOR CATTLE TO EAT, and reminds one but faintly of the fine mature corn that was put in the shock in the Fall.

The difference here is so great that it does not take very close observation to discover it. But the change that has taken place in storing dry fodder or hay is even greater than can be seen by an outward examination. Chemists who have analized a part of the fodder as it was shocked, and also

at times during the Winter and in the Spring, have shown us that the food materials originally found in the fodder have been consumed in some mysterious way during the storage or exposure of the fodder, in such a manner that there is often only half the amount of them left, and gen-

erally at least a third is gone.

It is easy to see where they have gone to, if the shocks have been left exposed to wind and weather; but we find that even where the fodder has been carefully stored under cover that there has been a considerable loss in the course of the Winter months amounting to one-fourth or one-fifth of the dry matter. (See Glossary). If a farmer is inclined to doubt the correctness



Silos on farm of L. H. Sutton, Akron, N. Y.

of this statement, it is easy for him to satisfy himself whether it is so or not, by weighing a shock of corn in the Fall and again in the Spring, keeping it in the meantime in the barn loft or somewhere where it will be left undisturbed and will not be exposed to rain or winds. A simple experiment like this will prove a surprise to many.

Now, in case of the Silo, it has been found that there is also a loss of food material in siloing (ensiloing) green fodders, but if a modern, good Silo is built the loss will not exceed 10 per cent. of the dry matter put into the Silo, and may be less.

In the early days of the Silo the losses found in siloing corn or other crops were much higher than this figure, but it is not difficult to understand the reason; often half of the fodder, or a large portion at any rate, rotted and had to be taken out and thrown on the manure pile; the Silo was not air-tight, and not built so that it could be made air-tight; if air gets into the Silo the fodder will

> spoil, and the longer it remains there the more of it will be spoilt. OUR MODERN SILOS ROUND there IS NO MOULDY SILAGE, AND to all appearances there has been NO LOSS IN FOOD MATERIALS. Chemists again tell us, however, that there is an unavoidable loss of, not to exceed 10 per cent., in siloing corn and similar crops, and this loss may, under favorable conditions, be

reduced to 5 per cent. The loss is furthermore not appreciably larger six months after the Silo was filled than it is one month after, so that a farmer who puts up a lot of corn for silage in the Fall can have as much valuable feed for his stock in the Spring, or in fact the following Summer or Fall as he would have if he proceeded to feed out the silage at once.

Another reason why the Silo has been adopted generally is that an acre of corn can be placed in it at less cost than it can be put up as cured fodder. To derive full benefit from the food materials in the field-cured fodder corn, it must be run through a feed cutter in small proportions at a time; the corn must in most cases be husked,

cribbed, and either ground, cob and all, or shelled and ground. In siloing corn, the whole plant is now, as a rule, run through the cutter and filled into the Silo at once, thus doing away with the separate handling of ear corn. Carefull experiments with milch cows, conducted by several of our experiment stations, have shown that silage thus made from corn cut "ears and all" has produced somewhat more milk and butter than dry fodder and ear-corn, handled and fed separately, the product from the same area of land

being compared in both cases.

Again, the Silo furnished a feed of uniform quality available and near at hand at any time of the year. NO NEED OF FIGHTING THE ELEMENTS OR WADING THROUGH SNOW OR MUD TO HAUL IT FROM THE FIELD. When feeding silage there need be no sudden change in the feed in the Fall or Spring. THE CATTLE CAN HAVE SUCCULENT FOOD THE WHOLE YEAR. This is of particular importance in feeding dairy

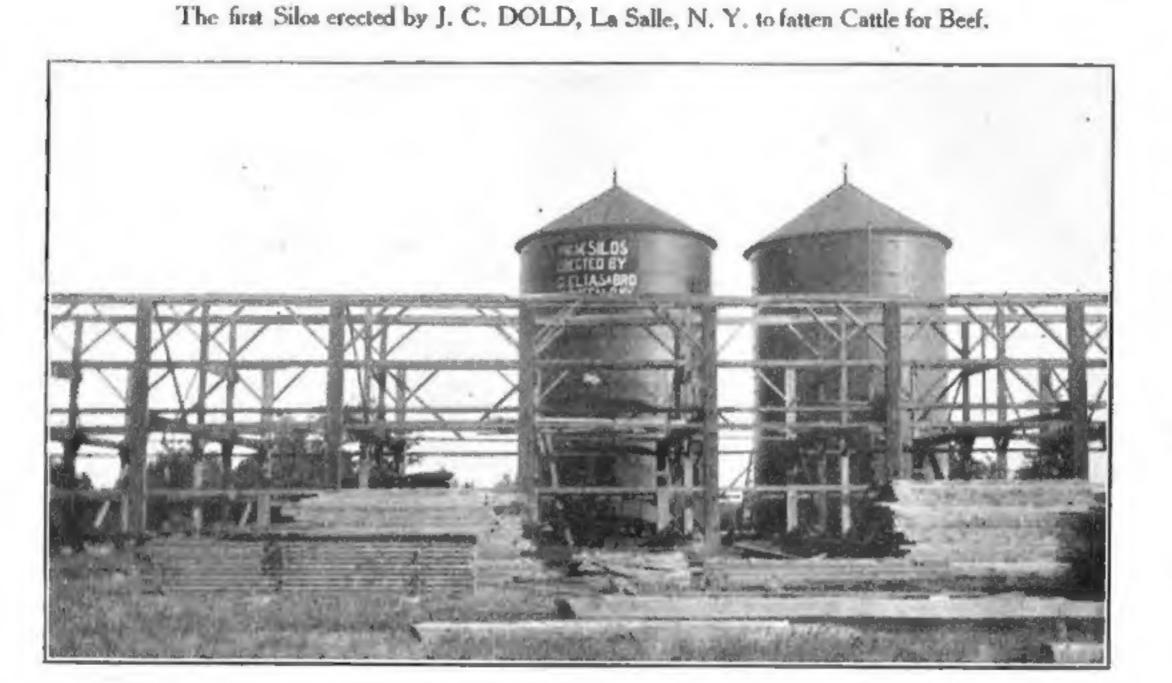
cows and fattening stock. Succulent food is natures food. The influence of well-preserved silage on the digestion and general health of animals is very beneficial. It is a mild laxative and acts in this way very similar to green fodders or root crops. Many farmers have reported that they have had NO TROUBLE WITH MILK FEVER IN THE HERDS SINCE THEY BEGAN FEEDING SILAGE, which is doubtless due to the beneficial effect of the silage on the digestive system of the cows.

The question of economy of storage room is entirely in favor of silage. Less room is required for storing the

product from a certain number of acres in the Silo than in a barn in cured condition. Hay placed in the mow will take up more than three times as much room as the same quantity of food materials put into the Silo. In the case of field-cured fodder corn the comparison comes out still more favorably to the Silo, on account of the greater difficulty in preventing the thick corn stalks from spoiling when placed under shelter.

We might go on and enumerate many other points

in which the siloing process has decidedly the advantage over the method of fieldcuring fodder or hay-making. The space forbids exhaustive treatment, however, and we shall now proceed to explain the method of building Silos and also the making and feeding of silage. As we go along, the reader will be able to see many ways in which SILAGE IS SUPERIOR TO DRY FEED, that have not been mentioned here-to-fore, and will, it is believed, agree with us that American stock



The Silos being more important than the barn were erected first. Frame of Barn in fore-ground.

and dairy farming in the future without the addition of a Silo will be an almost unheard of thing, as it ought to be.

## The Kind of a Silo to Build.

The first kind of Silos built, in this country or abroad, were simply holes or pits in the ground, into which the fodder was dumped, and the pit was then covered with a layer of dirt, and sometimes at least, weighted with planks and stones. Then, when it was found that a large proportion of the feed would spoil by this crude method, separate Silo structures were built, first of stone, and later on, of wood or grout. The shape of the Silos up to about ten

years ago was always rectangular or square, and they were shallow; later on they were generally built deep in the ground, as it was found that depth was necessary to guard against lots of spoilt silage. As it was, the corners in the square or rectangular Silo were the cause of much trouble and vexation, since it was next to impossible to avoid spoilt

silage in these. From the great pressure of the silæd mass, the walls of the Silos of this type would bend slightly and crack open at the corners, thus admitting air to the silced fodder and causing this to spoil. The next step in the evolution of Silo construction was the building of round, wooden Silos. These Silos have, during late years, largely been adopted in pre-



G. William Gardner, Erected 1908. Photo taken May 1, 1914.

ference to any of the older kinds of Silo structures. As originally planned they were deep Silos, at least 24 feet, and went down into the ground 6 to 8 feet. A stone foundation supported sills made of 2x4's and set 12 inches apart. On the inside of the studding were nailed three thicknesses of half-inch boards, put on horizontally with

acid-and-alkali-proof-tarred-paper between each layer of boards, then on the outside were put two layers of half-inch fencing with building paper between.

The building of the round, wooden Silos of this type was rather expensive, although not so much so as for the same sized square Silos; but the main objection to them

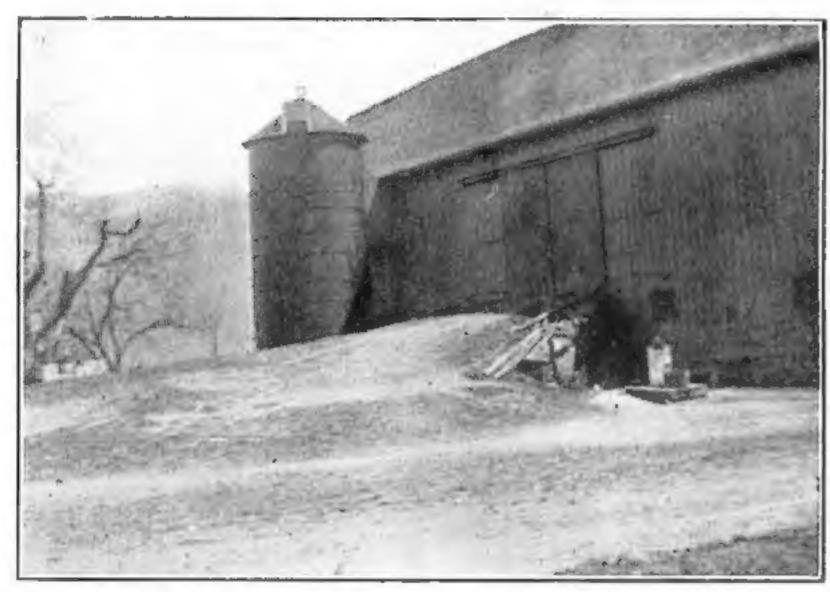
was the time it took to build them, and the unfamiliarity with the building of structures of this kind among ordinary farm help, and even carpenters. And so by a further step in a dvance we come to the

## STAVE SILO

The Stave Silo has to become the Silo of the future. It is not more than twenty years ago that the first Stave Silo was

put up, and during the last two or three years MORE SILOS OF THIS KIND HAVE BEEN BUILT THAN OF ALL OTHER KINDS PUT TOGETHER. The reasons for this remarkable record are several, the main ones being their cheapness, ease of construction, and the short time it takes to put up a Silo of this kind. The Stave Silo

has been called "The Poor Man's Silo," and some very cheap Silos have been constructed and reported in various agricultural papers. We must remember, however, that something has to be sacrifice when only cheapness aimed at. THE CHEAPEST SILO IS NOT! HE ONE THAT



E. R. Horley, Cuba, N. Y. Erected 1903. Photo taken May 5, 1914.

COSTS THE LEAST MONEY AT THE START, BUT THE SILO THAT WILL MAKE FIRST-CLASS SILAGE AND WILL LAST THE LONGEST. For this reason Silos should be built well, and then as cheaply as possible. Silos that have nothing in their favor but their cheapness cannot be looked upon as anything but a make-shift.

The best Stave Silos are built of either Yellow, White or Norway Pine. The material used will largely be determined by local conditions. Other kinds of wood than those mentioned are either unsuitable for Silo construction or are too expensive. So far as the quality of the silage made in any of these kinds of Silos is concerned there is no difference when the Silos are properly built. The Stave Silos are built something like large railroad tanks, only they are much higher, being at least 20 feet high and generally over 24 feet.

The following table shows at a glance the capacities of Silos of this kind from 20 to 32 feet deep, and 10 to 26 feet inside diameter:

## Capacity of Round Silos.

The first thing to be considered when a Silo is to be built is its size. To calculate how much silage will be needed to carry a certain amount of stock, we assume that, for instance, a cow will eat about 40 pounds of silage a day; this is very nearly one cubic foot of silage, on the average. Now, if a farmer has, say 25 cows or head of cattle, in his herd, and wants to provide silage for them for six months, or 180 days, he would need:

40 x 25 x 180=180,000 pounds,

or 90 tons. By looking at the following table we notice that there are several ways in which a 90-ton round Silo can be built, since this amount of silage is contained in Silos of the following dimensions:

Diam., 14 ft. Depth, 30 ft.
Diam., 15 ft. Depth, 27 ft.
Diam., 16 ft. Depth, 25 ft.
Diam., 16 ft. Depth, 25 ft.

FOR WELL MATURED CORN SILAGE, IN TONS.

DEPTH OF SILO	INSIDE DIAMETER OF SILO, FEET.														
FEET.	10	12	14	15	16	17	18	19	20	21	22	23	24	25	26
20	26	38	51	59	67	76			105						
21	28	40	55	63	72	81	-		112					4	
22	30	43	59	67	77	86			120				1		
23	32	46	62	72	82	92	103	115	128	141	154	169	184	199	210
24	34	49	66	76	87	98	110	122	135	149	164	179	195	212	229
25	36	52	70	81	90	104	116	129	143	158	173	190	206	224	242
26	38	55	74	85	97	110	123	137	152	168	184	201	219	,237	25
27	40	58	78	90	103	116	130	145	160	177	194	212	231	251	27
28	42	61	83	95	108	122	137	152	169	186	204	223	243	264	28
29	45	64	88	100	114	128	144	160	178	196	215	235	256	278	300
30	47	68	93	105	119	135	151	168	187	206	226	247	269	292	31.
31	49	70	96	110	125	141	158	176	195	215	236	258	282	305	33
32	51	73	101	115	131	148	166	185	205	226	248	271	295	320	34

For a small Silo a diameter of 10 to 12 feet is preferable to a larger diameter, as it gives more depth and less feeding surface. We shall soon come back to the matter of proper feeding surface in the Silo. It will be seen that we carry Silos 14 feet in diameter and 30 feet high, and 16 feet diameter and 24 feet high in stock, and either of these sizes of Silos will give perfect satisfaction where a farmer has enough stock to feed out about 90 tons of silage dur-

ing the season. The table gives the capacity of the Silo of different dimensions as filled clear to the top. If a Silo has a roof, as it ought to have, it is rather difficult to get the last couple of feet or last foot filled, and in estimating the size of Silo wanted, some allowance should always be made for this. It is also a safe rule to go by to make provisions for a larger Silo than sufficient for the present immediate demands. Ten-to-one you will feed



C. J. Hamlin, Snyder, N. Y. Photo taken May 1914.

more cows next year, or feed some to your sheep or horses, and the only safe method to pursue is, therefore, to make the Silo larger than what is wanted now.

The larger dimension wanted should, however, come from building the Silo deeper, and not of a larger diameter. If not fed out sufficiently rapid, the top will mould and be unfit for food for farm animals. In Winter time about two inches should be fed off the top of the silage daily, and in the warm season a little more. If the Silo is built of such a large diameter that the cows cannot eat up

about two inches daily from the top, there will be an unnecessary waste of silage, and silage that spoils will have to be carted off, which means needless work. By having the extra size in depth, on the other hand, the Silo needn't be filled quite full, on a filled full, the silage, which is not fed out in the Spring or early Summer, can be left undisturbed until late Summer or Fall when it may be needed to help out a short pasture, and only a small layer

will spoil on top if it is covered up. Some farmers have also filled their Silos anew in the Fall, dropping the cut corn on top of the old silage; sealed in this manner the silage WILL KEEP PERFECTLY FOR SEVERAL YEARS, AND PERHAPS, IN-DEFINITELY. At a large New Jersey dairy farm, where the number of Silos built reached twenty-four, the practice adopted was to keep the silage for two years before feeding it to the

cows, and according to the testimony of the farmer, the BEST SILAGE EVER FED OUT AT THE FARM WAS SEVEN YEARS OLD. There seems no good reason why silage should be kept that long before being fed, but it shows at any rate that silage will keep for a long time, at least for years without deteriorating in quality.

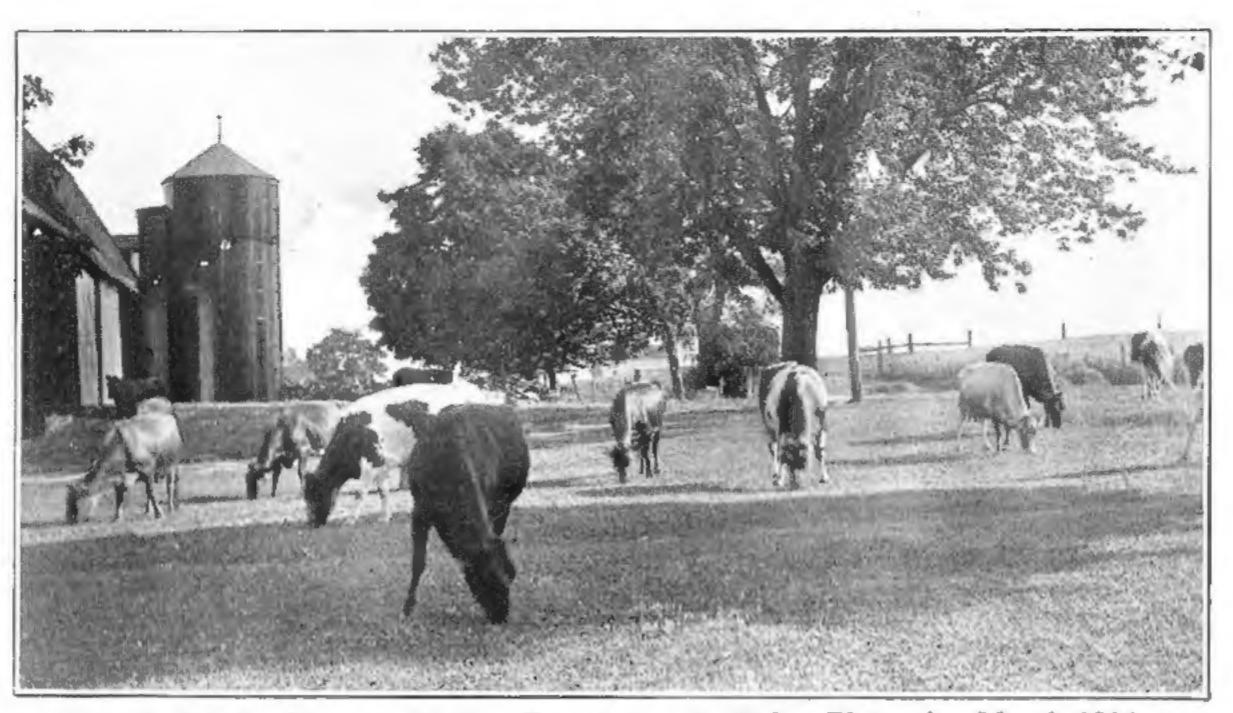
We shall, later on, discuss the matter of feeding silage to farm animals, quantities to be fed, best food to go with silage, etc., and shall now take up for consideration the crops to put into the Silo, kind, when cut for the Silo, and other questions of importance in this connection.

## SILAGE CROPS.

Corn stands first in importance as a silage crop in most parts of our country. In the whole northern, eastern and central sections of the United States, or in other words, where the dairy industry is of prime importance, silage is practically synonymous with corn silage. Almost the only other silage crop

that is met with is clover, and comparatively few farmers have tried making clover silage. As before stated, the practice of siloing corn now generally adopted by our best dairy farmers, is to cut the whole corn plant, ears and all, for the Silo. By this method the greatest economy in feeding is reached; there is no waste, or practically none, and the expensive operations of husking, shocking, shelling and grinding the corn are done away with. Corn is planted for the Silo in about the same manner as when wanted for ear corn, only somewhat thicker, so as to get more food materials per acre, and have a larger share of the food substances in the stalk and leaves of the corn plant. The corn may be planted in hills or in drills, whichever way seems preferable on account of the lay of the land, ease of keeping it free from weeds, etc. Under ordinary conditions in our country, the best results in growing corn for the Silo will be reached by planting the corn in drills, three or four feet apart, with plants six to eight inches apart in the drill.

If it is prefered to plant the corn in hills, these may



Darwin Eldridge, Macedon, N. Y. Erected Aug. 4, 1912. Photo taken May 6, 1914.

be put three, or even two and a half feet apart. The fertility of the corn land, conditions of moisture, temperature and other factors influencing the growth of crops are never alike in two years, and any definite practice of the thickness of planting adopted will not, therefore, necessarily produce the best results every year, but such methods of planting should be followed as has been found to give the best results on the average for a number of

years in each particular locality.

When the farmer has a corn harvester for cutting the corn, or any form of sled cutter, the corn should be planted in drills to facilitate the cutting. This method of cutting the corn, whether for the Silo or for dry fodder, has been generally adopted by farmers in the central and northwestern States, and the old corn-knife is now relegated to obscurity to a large extent. By the use of a corn harvester the labor of getting the corn to the Silo has been greatly reduced; the gavels are tied in small compass and are easily picked up and put upon wagons, two men doing, without difficulty, the work of three men with untied ones.

As regards the variety of corn that is best suited for the Silo, the safe rule to follow is to grow the kind of corn that will mature in each particular locality. Such varieties of corn will, in the long run, be found to furnish the largest quantities of dry matter, and certainly of digestable matter, per acre. The large southern varieties of corn will often yield more total dry matter per acre than the smaller northern varieties, but they are less digestible and more difficult to handle than the latter.

## Time to Cut Corn for the Silo.

As to the proper time of cutting the corn for the Silo, the universal practice is now to cut it at the roasting stage, when the corn has nearly reached maturity. In other words, a little before it would be cut for shock-corn. At this stage it contains the largest amount of digestible food material per acre, or nearly so, and it is still green enough to be heavy and pack well in the Silo. If corn is cut when in an immature condition, the quality of silage will be poor and very sour. Corn cut when largely green has not the food value, ton for ton, that mature corn has, a fact which is generally known by farmers.

## Corn Cutting for the Silo.

Some farmers do not run their corn through a cutter, prior to siloing (ensiloing) it, but put it into the Silo whole in a systematic manner, a gavel at a time, packing it hard in tiers as they go along. Everything considered, however, the

practice cannot be recommended, as it makes much more work of both filling and the emptying of the Silo, and also causes unecessary waste of silage. The best method is to cut the corn fine, viz: in ½ to 1 inch lengths. The corn will then pack well in the Silo, and it will make a fine silage that will be eaten up clean by the cows. If the corn is cut in longer pieces, 1½ or 2 inches, the cows will leave all butts, and a waste of silage thus be caused. The amount of corn that can

been tried by few farmers who report excellent results, and say that they get at least one-fourth more corn into the Silo that way than when the corn is cut by ordinary corn cutters. The leaves, stalks and ears are more thoroughly mixed than by the latter method, and the quality of the silage obtained is of the very best. The only objection to shedding the corn for the Silo is that it takes more power to run the corn through a shedder than through an ordinary silage corn cutter. Whether this objection is of sufficient importance to stand in the way of the more general adoption of this method of making silage can only be decided by future experience. It looks at this time as if

be filled into a Silo is somewhat greater when the corn is

The practice of shedding the corn for the Silo has

cut fine than when it is cut coarse.

shedded silage is going to be popular.

CLOVER—Next to corn in importance as a silage crop stands clover in most localities of our country. Clover silage is not made by our farmers to the extent that it ought to be. For one thing, many believe that a satisfactory quality of silage cannot be made from clover. This is,

however, certainly a mistake, for well-prepared clover silage has no superior as a food for dairy cows and sheep, and in our modern deep Silos there is no difficulty in making a fine quality of clover silage. The clover, as a silage crop, is still under the ban by many on account of the results obtained in siloing this crop in the old-fashioned shallow Silos. Clover is lighter than corn, and, therefore, did not pack as well as this crop in such Silos, with the result that in many cases most



Some stock raised on ensilage from these Silos.

of the clover put in had to be dumped on the manure pile, and there are few materials that smell worse than spoilt clover silage. But with our modern deep Silos the matter of making a fine quality of clover silage presents no difficulties. The clover is preferably cut into 1½ or 2 inch

lengths. It will then pack well, and when the Silo is opened there will be an aromatic, fine silage that is greatly relished by stock, and of much greater value than any other kind of succulent feed that we can get.

Growing much clover is the main tenet of modern agriculture teaching. The clover family has been found to enrich the soil by bringing nitrogen (see Glos-

Dr. Claris, Lackawanna, N. Y.

sary) into combinations that can be used as plant food by other crops.

Both for this reason, and because the long roots of of this plant bring valuable fertilizing elements up into the surface soil where other plants can make use of them, clover should be grown to such an extent as the system of farming followed and the character of the land will allow. It leaves the land, on which it grows, in a better state of fertility than it was before, and enables the farmer to reduce materially the amount of rich concentrated food (fleshforming substances) that is necessary to purchase for the nutrition of his stock.

Clover is cut for the Silo at about the same time as

for hay, viz: when half of the heads have turned brown. At this time the maximum amount of digestible food materials are obtained from the land, and the silage made from the clover cut at this time will be of superior quality if put into a modern deep Silo that is in proper air-tight

condition. A layer of corn put on the top of the clover will help to weight this down, and where both these crops are to be silced, which by the way, is an excellent plan, they are put into the Silo in this way, and not the clover on top of the corn.

ALFALFA is the main reliance of farmers in the western and Pacific Coast States, as a roughage for their farm animals. It is generally

cut and cured as hay, but it makes a splendid silage crop. Farmers who have fed alfalfa as silage are enthusiastic of it and prefer it very much to alfalfa hay, claiming it is a better food for dairy cows, fed as a silage, and is a more economical feed than fed as hay. The reason for this is not difficult to see when it is known, as shown by the Colorado experiment station, that "the minimum loss from the falling off of leaves and stems in successful alfalfa hay-making amounted to from 15 to 20 per cent., and cases where the conditions have been unfavorable, to as much as 60 and even 66 per cent. of the dry crop."

It is also estimated by western farmers that storms, if coming at the time of making alfalfa hay, reduce the

value of the hay by one-half.

The statement made in reference to the popular ideas of clover as a silage crop, applies equally well to alfalfa. In spite of the opinions of some farmers, alfalfa makes an ideal feed when put up as silage, as may be readily found out by farmers giving the matter a fair trial.

SORGHUM AND Cow Peas are two other crops that are filled into Silos in certain sections, the former the Central-western and South-western regions of the United States, and the latter in the South. Both make good silage which

is greatly relished by stock. Cow peas may be mixed with corn in the Silo, putting a load of cow peas in between every two loads of corn. This makes an excellent feed for dairy cows. As the cow-pea is rich in fleshforming substances (protein), a ton of this feed will go further than a ton of corn silage, and it is not necessary to feed so much expensive grain feed when cow-pea silage, or cowpea corn silage, is fed, as when silage made from corn alone is fed.



F. B. Clothier, Silver Creek, N. Y. Erected in 1902. Photo taken Jan. 1914.

It would be a mistake to suppose that the foregoing crops exhaust the list of silage materials. In Northern Europe the common silage crop is meadow grass, and the cereals cut, when in the dough, is also sometimes silæd. Other crops adapted for the Silo are soja bean, pea vine, teosinte, chicken corn, etc. In the beet-growing district the sugar beet pulp and beet tops make valuable silage materials. Lest someone think that the preceding enumeration completes the list, we quote from the discussion at the California Dairy Association. "The best silage I ever made," says a prominent California dairyman, "besides

corn, was made from weeds. A piece of wheat which was sowed early was drowned out, and the field came up with sorrel. I made this into silage, and when I fed it, the milk gained right away."

## Filling the Silo.

As corn is the main silage crop in most parts of our country the remarks made in the following refer particularly to this crop. We have already mentioned that the right time for cutting corn for the Silo is when the kernels

are well dented, or glazed, in case of the flint corn. When large Silos are filled, and in ease of drought when the corn is fast drying up, it is well to . begin cutting a little before it has reached this stage. But there is less danger of getting the corn too dry for the Silo now with our modern deep Silo than formerly. If the corn is rather dry, water may be sprinkled on it as thrown into the Silo, or into the Silo itself, but this entails extra work that may as well be avoided by start-

ing the cutter for the Silo earlier.

With a corn harvester and a steam engine at one's disposal the filling of the Silo can be accomplished, at the rate of about a hundred tons a day, if a sufficient force of men and a large cutter is at hand. It will take about eight men and two teams to fill the Silo at this rate. For a smaller farm a two or three-horse tread power is ample power for filling a Silo; a three-horse tread will give about twice the power of a two-horse tread and will nicely manage a No. 4 cutter, and elevate the fodder 24 feet. It is important to have ample power so that all hands are occu-

pied and no one is waiting for the others. In the silage cutter put on the market during the last year or two, the feeding table is revolving like an endless sidewalk, and the gavels tied by the corn harvester are thown on the feeding table without untying, whence they are carried to the knives, and after being mixed in the hopper box are elevated to the top of the Silo and dumped into the same. In case of large Silos a man or boy had better be kept in the Silo all the time during filling, spreading the cut mass evenly over the surface, and tramping it down around the wall of the Silo, so as to assist in having it settle evenly and not leave air spaces in the mass around the wall.

The filling can be continued without interruption until the Silo is full; then if a couple of days are allowed to pass, the silage will have settled several feet, and the filling can now be completed. If the Silo is not filled a second time it will not hold more than about three-fourths of its maxi-

mum amount of silage. It is practically impossible to get a Silo filled to the top with silage unless the filling process is repeated a number of times, as it will settle all the time for the first couple of weeks after filling. In estimating the size of Silo needed this fact should be borne in mind, and if it is not intended to repeat filling the Silo once or twice, a larger size than that indicated by the figures in the table on page 6 should be provided for.

If the corn goes into the

Silo in a rather dry condition the lower leaves of the plants being all yellow and the ears hard, it is a good plan to pour some water on the top of the corn in the Silo, say a gallon per square foot, repeating this process about a week later. This will make a strictly impervious layer of the upper six or eight inches, which will protect the corn below from spoiling; immediately below this top layer the silage will be found sweet and bright when the Silo is opened. The plans for covering the corn in the Silo proposed and tried by "Siloists" are both numerous and varied, but there is hardly anything cheaper or more effective than the method proposed. Marsh hay, straw, saw dust, etc., are used by some for this purpose, but they are not as effective as corn wetted down for preserving the under-lying silage.

None of the materials proposed will preserve the entire mass of corn from spoiling; there will always be a spoiled layer of silage on top. The only way in which all the corn can be preserved and utilized for feeding is to begin feeding from the top shortly after the Silo has been filled. This method is now being practiced by many farmers, especially dairymen, who in this manner supplement scant

Fall pastures. By this method the siloing system is brought to perfection, provided the Silo is built properly and is airtight, there being no waste of feed from the time the Silo is filled till it is again empty.

SUMMER SILAGE.—The practice of putting up silage for supplementing short pastures has become general in dairy regions during late years. The pastures very often fail to supply sufficient feed for the cows to keep up in flow of milk during the latter part of the

Summer, and unless recourse is taken to other feeds, the set-back which the cows will thus receive in their production of milk and butter fat cannot be overcome for a long time, even by very liberal feeding later on. Siloing crops



Wm. S. Kent, Stockton, N. Y. Erected in 1902. Photographed Jan. 1914.

are good for the purpose of supplementing scant pastures, and still better is Summer silage. Many farmers have a special stave Silo for this purpose which is filled in the Fall and not opened until the Spring or mid-summer. The cows can then have plenty of food clear to the time of tying in, and there need be no shortage in the milk flow on account of poor Fall pastures.

IT IS VERY DESIRABLE TO HAVE SILAGE ON HAND AT FLY TIME. The cows can then be fed silage and some grain in darkened stables during the day and turned into the pasture at night when they may rest peacefully and not driven to distraction by their small tormenters, as in the day time. The effect of

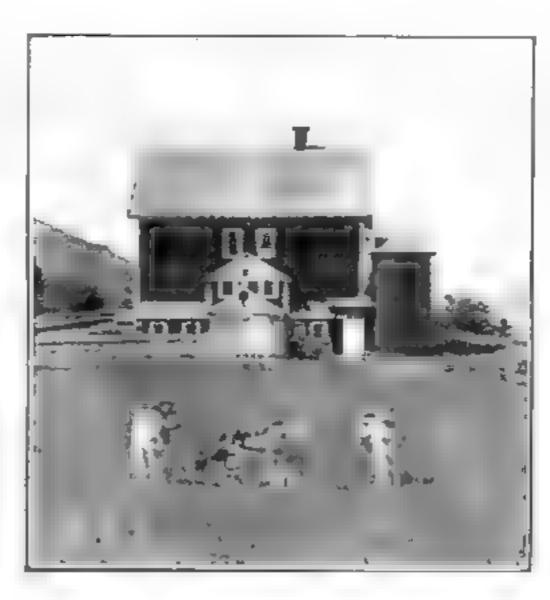
fly-time on the milk flow would be far less marked if this system of feeding was generally practiced, and more dairymen made provisions to have a sufficient supply of Summer silage on hand.

## Digestibility of Silage.

This should not be the place to discuss the chemistry of the Silo or the chemical composition of silage. A few words may, however, be in order as to the digestibility and general food value of silage as compared with dry fodder, in order to show that the corn is not decreased in food value during the siloing process as might be suggested by some. The following digestion co-efficients (see Glossary) for corn silage and dry corn fodder will tell the story:

	Dry matter.	Protein.	Crude fiber.	Nitrogen free extract.	Either extract.	
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	
Corn Stover	66	48	57	76	76	
Corn Silage	64	52	62	69	85	
Green Corn	67	54	51	75	78	

The figures given in the table show that there is no



A. J. Nicoll, Delhi, N. Y. Erected 1902. Photo taken 1914.

marked difference in the digestibility of dry or green corn or corn silage. The small differences that appear are in some cases in favor of the dry corn and in others in favor of the corn silage. On the whole the silage compares favorably with either of these feeding stuffs. The results of actual feeding trials have also shown that there can be no marked difference in the digestibility of dry fodder and silage, for about similar results have been obtained with different kinds of farm animals where the two feeds have been compared with one another, with the corn silage a little ahead at times. For instance, in feeding experiments with milch cows at the N. H. station, the SILAGE PRODUCED 17

PER CENT. BETTER RESULTS THAN HAY, equal amounts of dry matter being considered in both cases. In an experiment with twenty cows at the Wisconsin station, where field-cured fodder corn and corn silage made from the same kind of corn were compared, the GAIN IN FAVOR OF SILAGE FOUND WAS 13 PER CENT. This shows, that, under the most careful handling the field-cured fodder can get, it will not produce as good results as silage made from the same corn.

Not only for dairy cows, but also for steers and sheep, has corn silage been found to be fully equal, or even in many cases superior, to corresponding dry fodder. This is a matter which has been determined over and over again, and which does not, therefore, now admit of doubt.

## Feeding of Silage.

SILAGE IS A FIRST CLASS FOOD FOR ALL KINDS OF FARM ANIMALS, when fed in the right manner, but it is ESPECIALLY VALUABLE FOR FEEDING DAIRY CATTLE AND FATTENING STEERS AND SHEEP. It does not detract from the

value of green clover that cows will bloat if allowed to eat all they can get down of it; neither does it make silage less valuable that it cannot be fed as exclusive coarse food to best advantage, or that some animals, like swine and horses, do not take kindly to the feed unless they are gradually made accustomed to it. The rule to feed some dry rough-age along with the silage should always be observed, no matter to what kind of animals the silage is fed. Furthermore, as corn silage is rather deficient in flesh-forming substances (protein), the grain-feed fed with it should be made up of feeds relatively rich in these important components.

The most important use made of silage is for the feeding of dairy cows. SILAGE STANDS NEAR THE TOP OF THE LIST OF FOODS FOR THE DAIRY COW, and the dairymen were the first farmers to adopt the siloing system in their method of farming. To-day there are more Silos in dairy districts than among any other class of farmers. Corn silage, clover silage, alfalfa silage and all other kinds of silage, make excellent dairy feeds. As regards amounts that had better be fed we may say that ordinarily

not more than 40 pounds of corn silage, and somewhat less of clover silage, should be fed per head daily. Corn silage from natural corn, which is relatively dry, may be fed in larger quantities. A moderate allowance that will whet the appetite of the cows for more, is the best. There is no objection to feeding as much as 50 or 60 pounds of silage a day if it is rendered necessary to do so, but if a fair amount of dry corn fodder, or hay is fed, the cows will not be apt to want more than about 40 pounds a day. As it may be of some help to our readers a number of balanced rations, or

such as are near enough balanced to produce good results at the pail, are presented below (see Glossary). The rations given are intended to include all our main kinds of feeding stuffs.

## Silage Rations for Milch Cows.

- No. 1. Corn silage, 35 lbs.; hay, 8 lbs.; wheat-bran, 4 lbs.; ground oats, 3 lbs.; oil meal, 2 lbs.
- No. 2. Corn silage, 30 lbs.; corn stalks, 10 lbs.; corn meal, 2 lbs.; wheat-bran, 4 lbs.; malt sprouts, 3 lbs.; oil meal, 1 lb.
- No. 3. Corn silage, 40 lbs.; clover and timothy hay, mixed, 10 lbs.; wheatshorts, 3 lbs.; gluten feed, 3 lbs.; corn and cob meal, 3 lbs.
  - No. 4. Corn silage, 20 lbs.; corn stalks, 10 lbs.; hay, 4 lbs.; wheat-bran, 4 lbs.; gluten meal, 3 lbs.; ground oats, 3 lbs.
  - No. 5. Corn silage, 40 lbs.; clover hay, 10 lbs.; oat feed, 4 lbs.; corn meal, 3 lbs.; gluten feed, 3 lbs.
  - No. 6. Corn silage, 45 lbs.; corn stalks, 5 lbs.; oat straw, 5 lbs.; dried brewers' grains, 4 lbs.; wheat shorts, 4 lbs.



Erected in 1896. Photo taken in Jan. 1914.

- No. 7. Corn silage, 35 lbs.; hay, 10 lbs.; corn meal, 3 lbs.; wheat-bran, 4 lbs.; oats, 3 lbs.
- No. 8. Corn silage, 40 lbs.; corn stover, 8 lbs.; wheatbran, 4 lbs.; gluten meal, 2 lbs.; oil meal, 2 lbs.
- No. 9. Corn silage, 20 lbs.; clover and timothy hay, 15 lbs.; corn meal, 3 lbs.; ground oats, 3 lbs.; oil meal, 2 lbs.; cotton seed meal, 1 lb.
- No. 10. Clover silage, 25 lbs.; corn stover, 10 lbs.; hay, 5 lbs.; wheat shorts, 2 lbs.; oat feed, 4 lbs.; corn meal, 2 lbs.

No. 11. Clover silage, 30 lbs.; dry fodder corn, 10 lbs.; oat straw, 4 lbs.; wheat-bran, 4 lbs.; malt sprouts, 2 lbs.; oil meal, 2 lbs.

No. 12. Clover silage, 40 lbs.; hay, 10 lbs.; roots, 20 lbs.; corn meal, 4 lbs.; ground oats, 4 lbs.

The preceding rations are only intended as approximate guides in feeding dairy cows. Every dairy farmer knows that there are hardly two cows that will act in exactly the same manner and will need exactly the same amount of feed. It is then important to adapt the quantities and kinds of feed given to the special needs of the different cows; one cow will fatten on corn meal, where another will be able to eat and make good use of two or three quarts of it. In the same way some cows will eat more roughage than others and do equally well on it as those that get more of the food in the form of more concentrated and highly digestible feeding stuffs. The only safe rule to go by is to feed according to the different needs of the cows; to study each cow and find out how much food she can take care of without laying on flesh, and how she responds to the feeding of foods of different characters, like wheat, bran and corn meal, for instance. The specimen rations given in the preceding can, therefore, only be used to show the average amounts of common feeds which a good dairy cow can take in and give proper returns for.

As regards the feeding of silage to other classes of farm animals there is not much need of further explanation as the general principles explained in the foregoing apply to those as well. It is always best to begin with small feeds and gradually accustom the animals to the silage. The failure to observe this rule is responsible for many reports that have been circulated as to, for instance, pigs and horses, and even sheep, not wanting to eat or not liking silage. It is evident from a general consideration of the matter, that silage is not particularly adapted to be fed in large quantities to either horses or swine, as it is too bulky and heavy a feed to be used in this way for these animals, but

it is valuable as a relish when fed sparingly and with care.

## Glossary.

#### ALBU'/INOIDS.

A group of substances of the highest importance in feeding farm animals, as they furnish the material from which flesh, blood, skin, wool, easein of milk, and other animal products, are made. Another name for albuminoids is flesh-forming substances or protein.

#### ASH.

The portion of feeding stuff which remains when these are burnt; the incombustible part of foods. The ash of feeding stuffs go to make the skeleton of young animals, and in case of milch cows a part of it is used to make the ash of the milk.

#### BALANCED RATION.

A ration made up of such proportions of the various food substances so as to insure their full utilization, where the ratio of digestible flesh-forming substances to starchy substances is as about 1 to 5 or 6 (nutritive ratio 1:5-6.)

#### CARBOHYDRATES.

A group of substances forming the largest part of the common feeding stuffs and present in all vegetable and animal foods. The most familiar examples of carbohydrates are starch, sugar and cellulose, or crude fiber. The two first mentioned components are also known as nitrogenfree extract, for the reason that they do not contain the element nitrogen, which is found in all albuminoids or protein bodies.

#### DIGESTIBLE MATTER.

The portion of food which is brought into solution by the digestive juices in the body, and goes to nourish the animal and furnish material for the production of meat, milk, wool, pork, etc.

#### DIGESTION COEFFICIENTS.

The percentages of the various food components that are digested and of actual value to the animal.

#### DRY MATTER.

The portion of feeding stuffs remaining after the water found therein has been removed or driven out by heat.

#### ETHER EXTRACT.

The portion of feeding stuffs dissolved by ether; mainly fat or oil in the concentrated feeding stuffs; in the coarse fodders, fat mixed with a number of substances, like wax, and chlorophyll (the green coloring matter is grass, etc.)

### NITROGEN.

The element found in flesh-forming substances only, among the common food constituents. Carbohydrates and fat contains no nitrogen.

#### NUTRITIVE RATIO.

The proportion of digestible flesh-forming substances to the sum of carbohydrates and fat, the amounts of the latter component being multiplied by  $2\frac{1}{4}$ , as it has  $2\frac{1}{4}$  times the nutritive value of the former.

#### SILO.

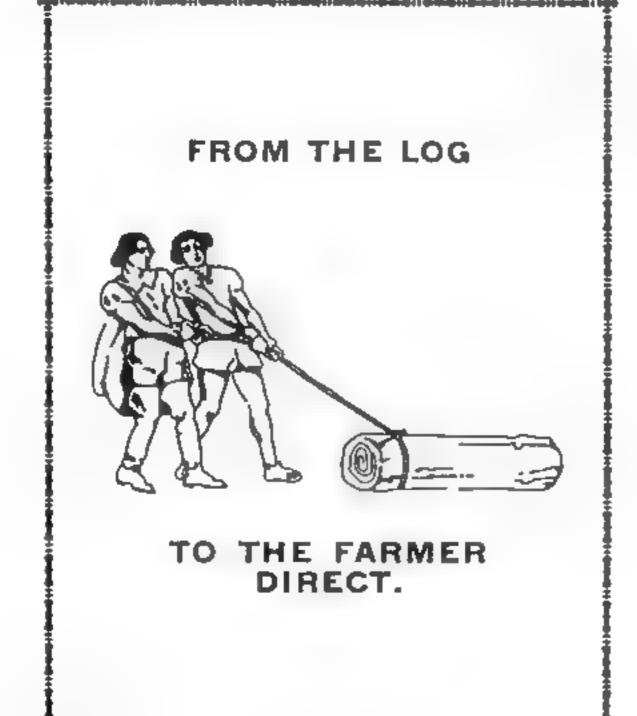
An air-tight structure used for the preservation of green, coarse fodders in a succulent condition.

#### SILAGE.

The succulent feed taken out of a Silo. Formerly called ensilage.

#### SUMMER SILAGE.

Silage intended to be fed out during Summer time.



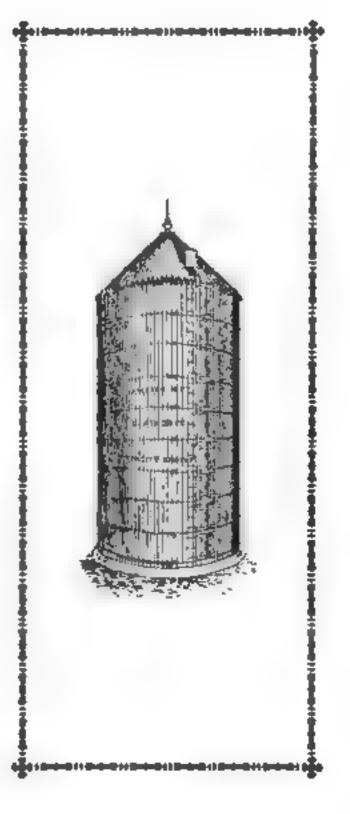
## Buy of us and you Save

all intermediate profits and get a Silo that will give you results.

OUR SILOS ARE ALL SUCCESSES.

No failures or disappointments. We have confidence in and trust the farmer.

We do not ask pay in advance.



## 8 Reasons Why

## Our Silos are superior to all others

- 1. We use nothing but material which we have tested and learned by long experience is the best adapted and most durable.
- 2. Our Silos being shipped in the "knock down" we send them all worked so that ordinary intelligent farm help will be able to set them up from directions which we send with each Silo.
- 3. We furnish for every silo, paint for the outside, a specially prepared coating for the inside, wrench to tighten the hoops and everything to make a complete Silo. You have nothing to buy to set it up.
- 4. Our prices are f. o. b. Buffalo, but we ship at the lowest possible freight rate.
- 5. Our Silos will go together better and can be erected quicker and when erected will be found air tight and more convenient to use than any other silo on the market.
- 6. Our newly designed door front and method of fastening doors, on which we have a patent is superior to any other known form.
- 7. Our coating for the inside of our Silos prevents the Silo absorbing the liquid of the ensilage, thus, better preserving the ensilage and preventing the Silo from rotting, the paint on outside protects it from the weather.
- 8. At our prices, quality, ease of erection and general points of excellence considered, it is the cheapest, simplest and best Silo on the market.

## Our Guarantee.

Every Silo made and sold by us is guaranteed as represented in every respect, or no sale.

No money asked for until you have received the Silo and found it as represented.

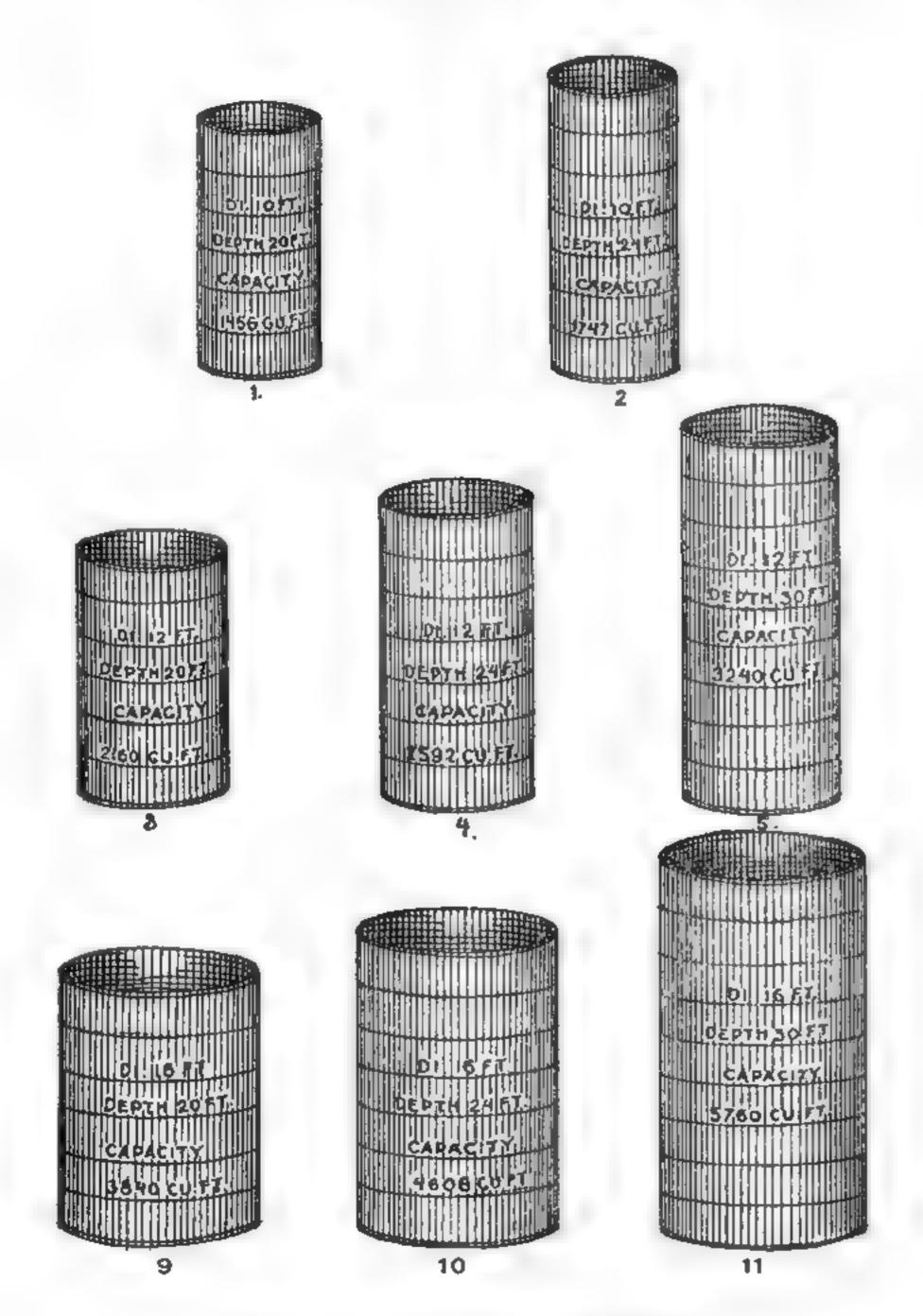
## Our Aim

To give our customers the greatest amount of durable Silo capacity for the least amount of money.

Read the testimonial letters that follow and see how well we have succeeded.

## Comparative Sizes of Silos

#### SHOWING THE PROPORTIONS AND CAPACITIES



OTHER SIZES MADE TO ORDER.

## STANDARD SIZES

## G. ELIAS & BRO. Inc. SILOS.

NUMBER, DIAMETER. HEIGHT, AND CAPACITY.

	SIZE.			CAPACITY.							
No.	DIAMETER.	HEIGHT.	-11-	CUBIC .	TONS SILAGE.	COWS WINTERED.	ACRES				
1	10 feet.	20 feet.		1455	29	7	$\begin{bmatrix} 2\frac{1}{2} \\ 2\frac{3}{4} \end{bmatrix}$				
$\begin{bmatrix} 2 \\ 3 \end{bmatrix}$	10 "	24 "	1	1747	35	9					
- 0	12 "	20 "		$\frac{2160}{2532}$	43 51	11 13	33				
- 5	12 6	30 "		3240	65	16	5				
6 1	14 **	20 "	,	3020	60	14	4.}				
7	14 "	24 "		3624	72	17	$5\overline{3}$				
$-8$ $\pm$	14 "	30 "	h	-4530	90}	21	7				
9.1	16 44	20 44		3840	77	19	6				
10	16 "	24 "	1	4608	92	23	71				
11.	16 16	30 "	- 1	5760	115	29	9				

#### OTHER SIZES MADE TO ORDER.

#### APPROXIMATE SHIPPING WEIGHTS OF SILOS.

10	X	20	ft,	about	4900	lbs.	14	x	24	ft.	about	8200	lbs.
				4.6	_		T				6.6	,,,,	
		_		6.4			16	x	20	46	6.6	7700	46
12	х	24	1.6	6.6	7000	4.6					1.6	9100	66
12					8700	6.6	16	x	30	66	4.6	11400	6.
14	x	20	- 6.6	6.6	6800	4.6							

#### APPROXIMATE WEIGHTS OF ROOFS.

10 ft. about 900 lbs. 12 ft. 1250 lbs. 14 ft. 1400 lbs. 16 ft. 2100 lbs.

#### FOR PRICES SEE PRICE LIST.

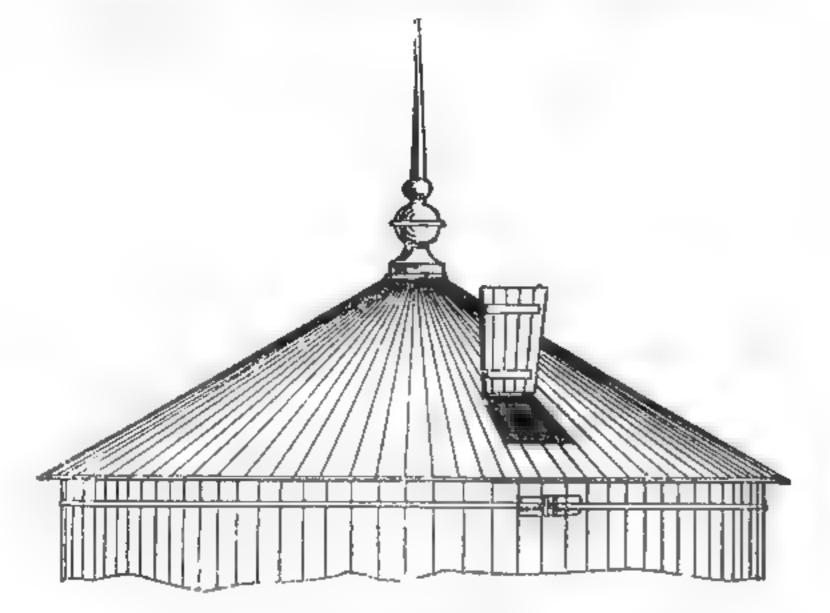
SILOS when built on concrete base require no wooden bottoms. Prices for Silos complete, include the staves dressed, matched and beveled to fit; iron rods, nuts and castings forming the hoops; specially prepared coating for inside, and ready-mixed paint, [any color desired] for outside.

STAVES for Yellow Pine Silos and at times Norway Pine Silos are furnished full lengths, White Pine staves are always spliced.

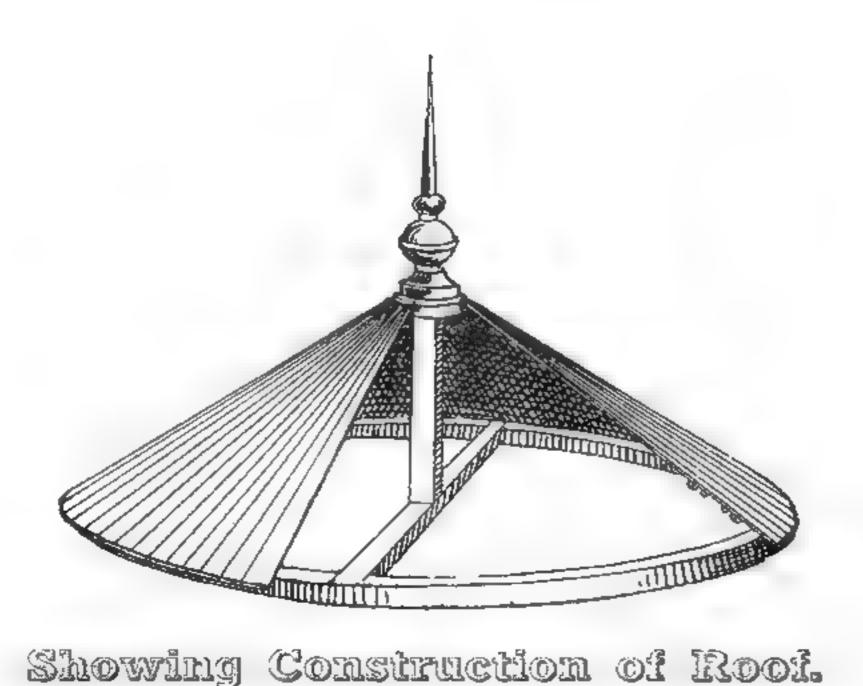
We will send man to erect Silo when required, charging only for his actual time and expenses.

Prices are F. O. B. Buffalo, N. Y. We will get the lowest possible freight rates for all customers.

## Our Conical Roof



IS VERY EFFICIENT, ECONOMICAL AND SIMPLE. EASILY ERECTED.



## Nothing Useless in our Silos

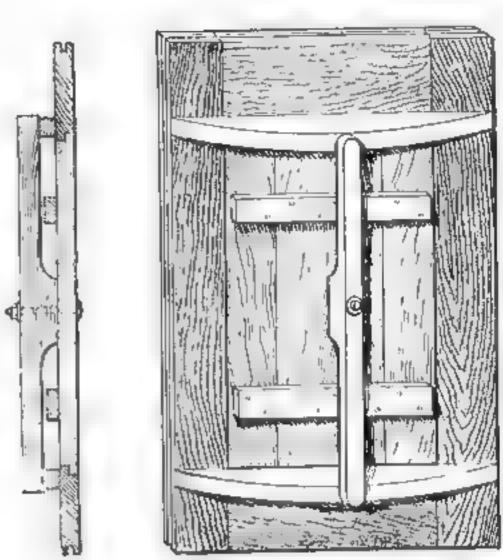
We don't have a lot useless door fixtures which are a constant source of annoyance. Our door is simple, durable, effective, air-tight, always in order. It fills the bill perfectly.

## REMEMBER

NO HINGES OR OTHER IRON TO RUST AND GET OUT OF ORDER

AND DON'T FORGET

No pieces to wedge in to be pried loose with a crow bar.



## Our Common-sense Ladder Rung.



Easily attached to Silo and very safe and convenient to use.

The only thing to do to make our Silos last indefinitely is to keep the rods tight. Ample provision made for doing so.

We use round steel hoops in three sections, fastened together with Mal-



leable Iron Lugs, 5" of thread at each end of each rod, giving plenty of opportunity to take up any shrinkage.

## To Get Best Results

from feeding Silage you must start right.

# THE FOLLOWING ILLUSTRATIONS SHOW HOW TO MAKE THE RIGHT BEGINNING FOR A SILO.

Nothing complicated or difficult to understand about setting up our Silos.

They are shipped all ready to set up.

Any handy man can erect them.

# HERE WE SHOW HOW OUR SILOS ARE CONSTRUCTED.

Our Silos should be built on a Concrete Foundation.

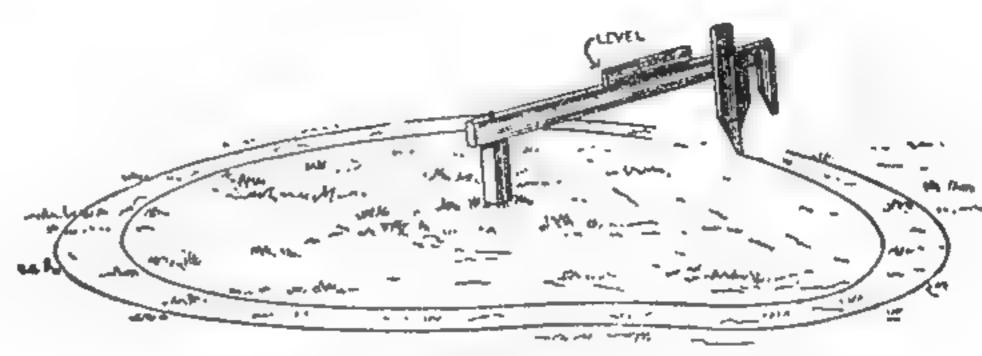


FIGURE 1.

## LAYING OFF THE FOUNDATION ON SLOPING GROUND.

Drive a stake in center of proposed site. Cut a  $2'' \times 4''$  one foot longer than the diameter. Nail two pieces as shown to end of piece, one 6'' less and the other, 6'' greater than diameter. Fasten stick to center stake so it will turn on pivot and mark the outline for base. The thickness of wall or trench may be varied to suit all conditions.

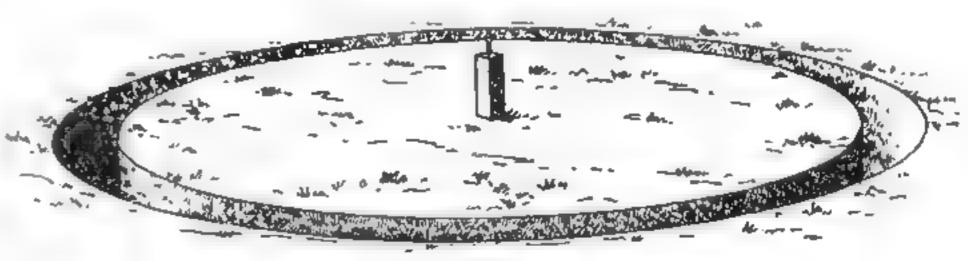


FIGURE 2.

CONCRETE. As concrete foundations are the most durable and the most extensively used, we give a full description of the way to make a concrete foundation. The concrete wall for the foundation should be at least 1 foot wide. Where the soil is soft and light it is advisable to have the wall about 1 foot wide at the top and about 1½ ft. wide at the base in order to increase the bearing surface.

Form for filling with concrete.

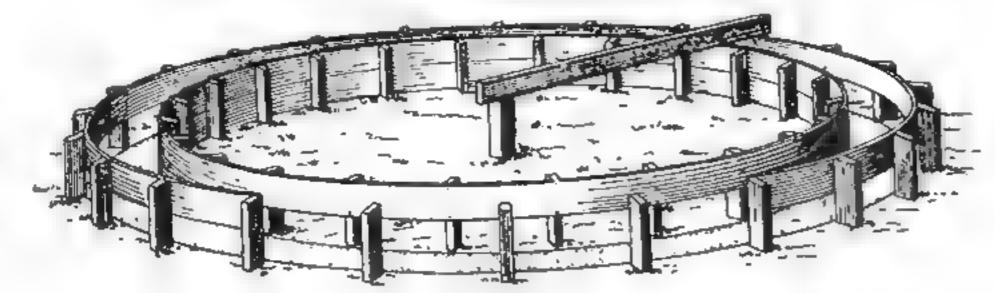


FIGURE 3.

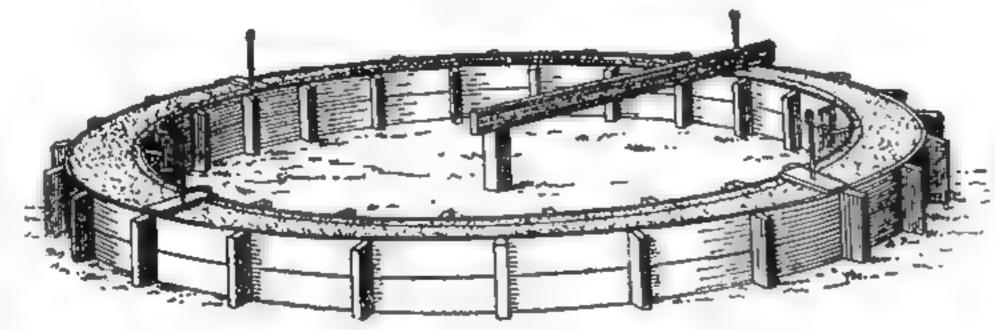


FIGURE 4.

Form filled with Concrete showing Eyebolts and Slats in place and circle to mark position of staves.

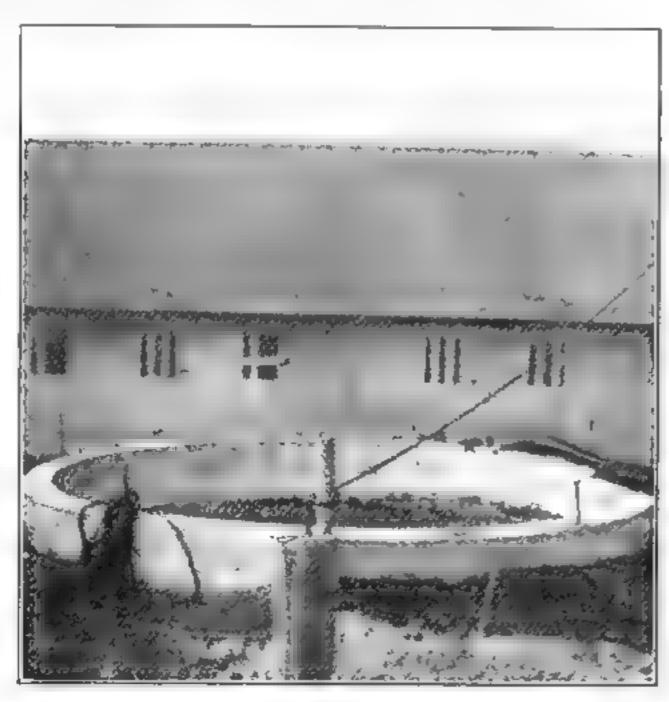
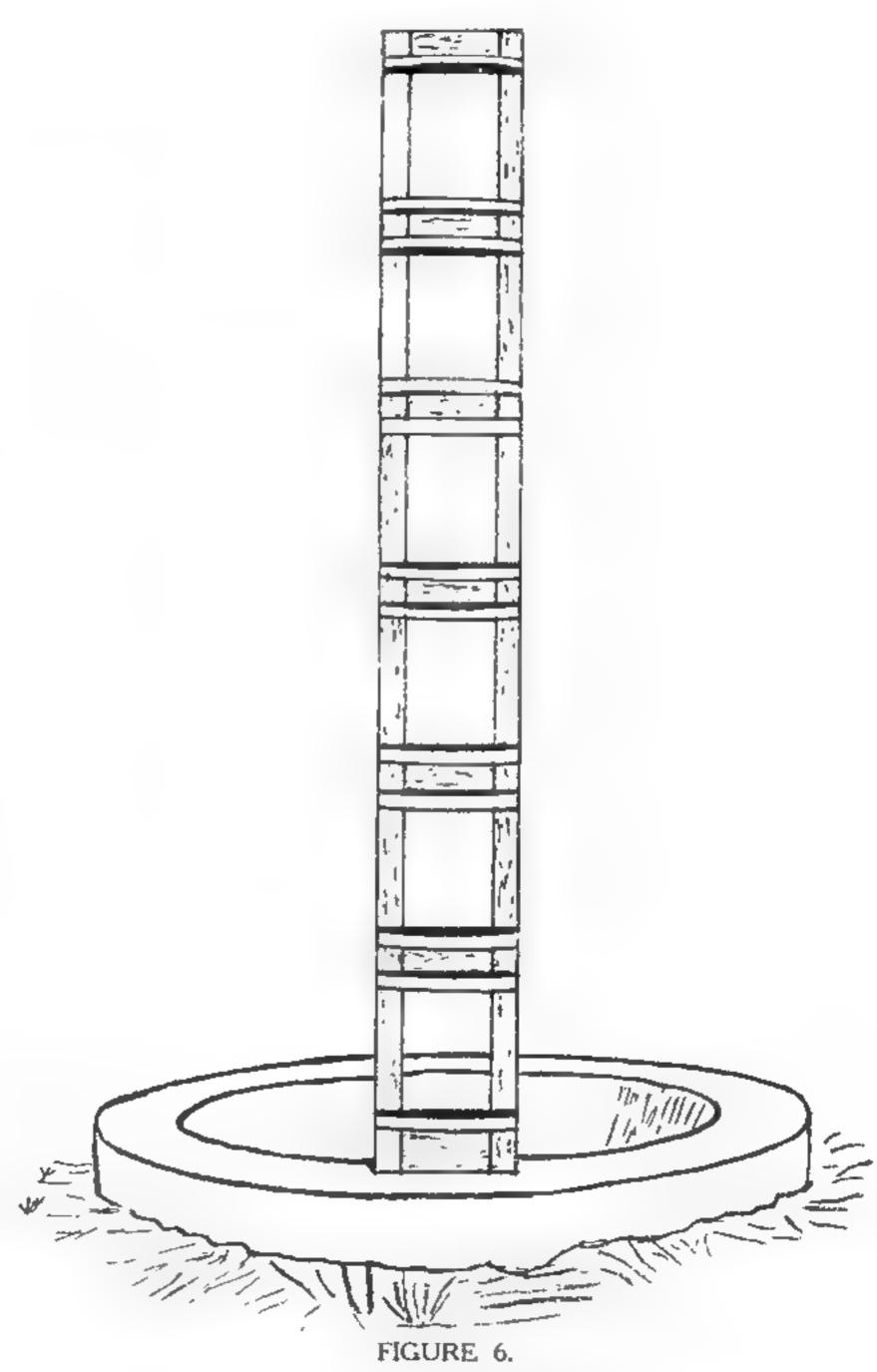


FIGURE 5.

View of foundation, all ready to erect the Silo with the wooden frame removed.

After the concrete is sufficiently set, stand up the Door front on same, plumb in every direction, and stay the same in place, then follow around the foundation with the staves.

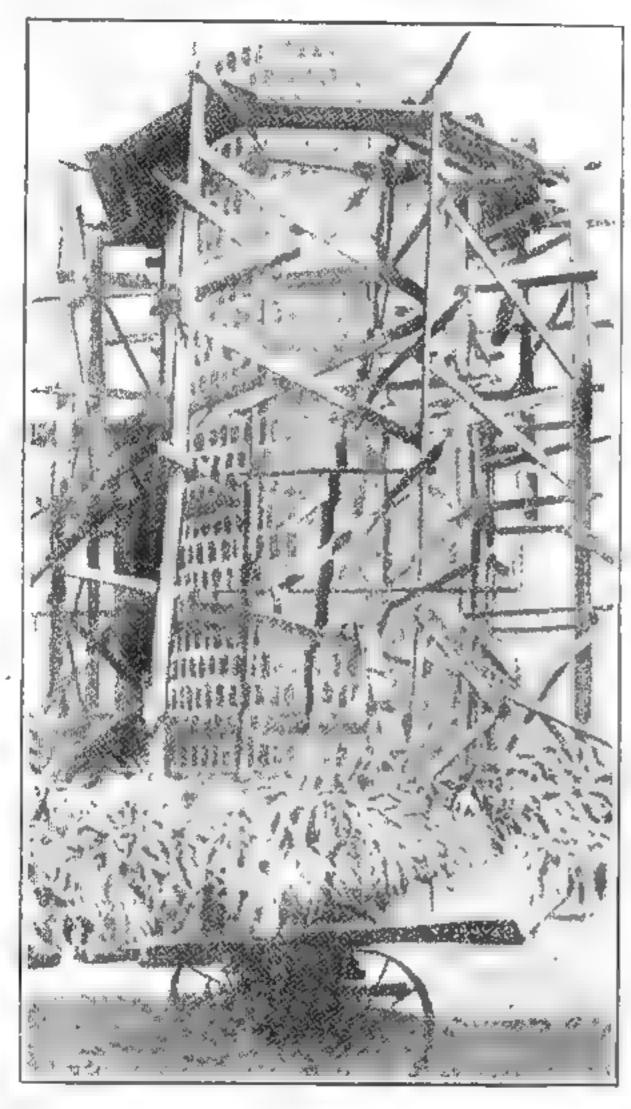
Full directions sent with every Silo that ordinary farm help following our instructions can erect same.



Silo Front in Position.

## Some Expensive Experiments with other Silos.

View of Tile Silo being erected.



This Silo exploded from heat and pressure.
It cost \$475.00 Loss about \$1000.00





This Silo was reinforced by hoops and every precaution was taken; yet it burst the second time it was filled.

Don't let some clever salesman talk you into buying one of these. You run no risk in buying our tried-out-Silo.

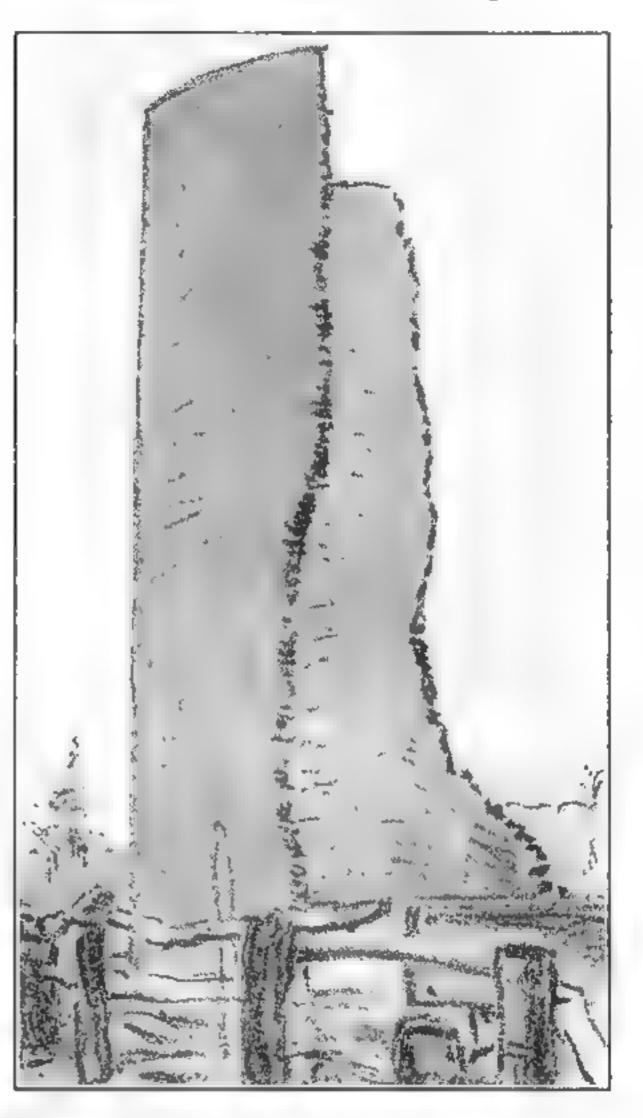
## No such Catastrophe would happen to our Stave Silos.

## Actual Photo of a Concrete Collapse.



This Silo not only ruined itself, but look at the damage to adjacent buildings. Wood Silos are best.

## Another Concrete Silo Collapse.

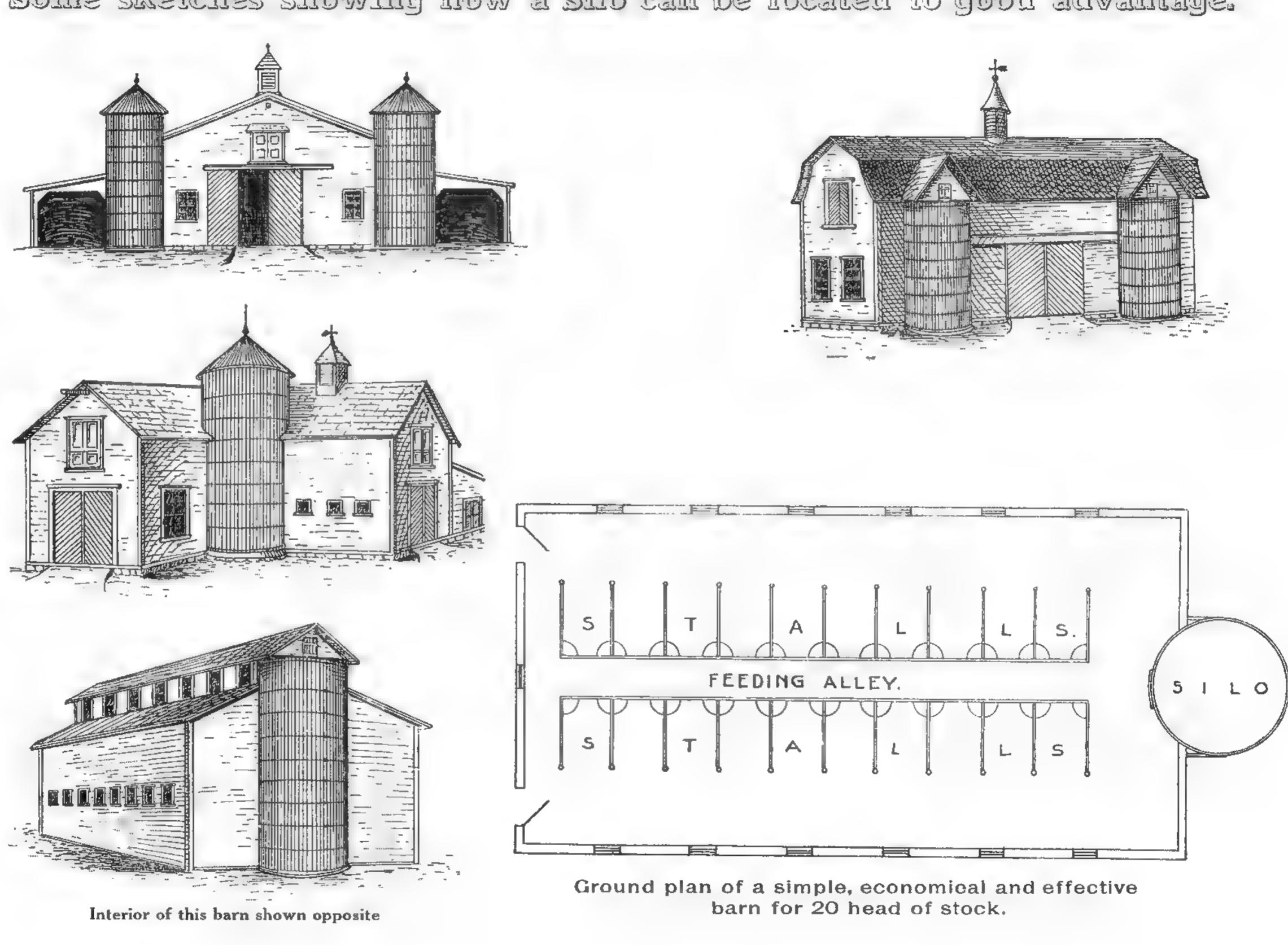


Photographed on Farm of owner. Loss including ensilage about \$1500.00.

No Insurance.

Convincing proof that a high priced Silo is not the best.

Some sketches showing how a Silo can be located to good advantage.



## What our Customers say about our Silos after many years of actual use.

Not a lot of old letters written by enthusiastic buyers just after they had received their Silos, but, by conservative users who have had and made use of our Silos for years.

We are pioneers in the manufacture of Silos. We have experimented for years on our Silos at our expense. Don't buy one of some amateur maker of Silos who will experiment on you at your expense.

BEFORE PLACING YOUR SILO ORDER WITH ANY FIRM, ASK THEM HOW LONG THEY HAVE BEEN MAKING SILOS?

Rockville, Md., April 20, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Yours of 18th at hand. The Silo bought of you in 1901 is still standing and was filled last year as usual. I do not know what has made it stand up so long unless it is in a very favorable location, because nearly all the Stave Silos in the neighborhood have been blown down at one time or another, while ours has had no special care.

Of course the hoops were screwed up a time or two when first put up, but nothing has been done to it for some years.

I have filled it every year since it was erected.
Yours truly,

John A. Muncaster.

Bought in 1901, is still standing and was filled last year as usual.
Ours stands while others have blown down.

Holland Patent, N. Y., May 6th, 1914.

G. Elias & Bro.

Dear Sirs:—The Silo I bought of you in 1901 stands and is apparently as good as the day it was set up.

I have no suggestion to make. It is perfect.

Geo. G. Chassell.

No suggestion to make. It is perfect.

Derry, Pa., May 9, 1914. G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Yours of a few days ago to hand, and in reply would say that after twelve years of use, my Silo purchased from you, is still giving splendid serive. It has blown down twice and been rebuilt. When it comes to holding and keeping silage, it is "all there". Fed out last year's filling; less than 25 bushel of waste. Several of my neighbors are thinking of putting up Silos and I have spoken about yours. Please send them circulars.

Very truly yours,
W. W. Nicol.

After twelve years of use, is still giving splendid service, even after being blown down twice.

Cuba, N. Y., May 9th, 1914.

G. Elias & Bro., Buffalo, N. Y.

My Dear Sirs:—Yours received. Your Silo has been in constant use since it was purchased in 1901, and I have no fault to find with it in any way. The lumber and ironwork was good and at this time shows no flaw of any kind, and I think the Silo is as good now as when purchased.

Very truly, J. H. Setchel.

The lumber and iron-work was good and at this time shows no flaw of any kind.

Delhi, N. Y., April 29, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—After using one of your Silos continuously, for 12 years can say that it has proven satisfactory in every way. For keeping Silo feed, they cannot be surpassed. There is not a break nor a leak at a door or the bottom that is the Silos fault. You are at liberty to use my name as a recommendation, in your own words.

Yours truly,

R. M. Stewart.

After using Silo continuously, for 12 years can say that it has proven satisfactory.

New York City, April 29, 1914.

Messrs, G. Elias & Bro., Buffalo, N. Y.

Gentlemen: —I am no longer on the farm at Port Gibson, but my brother and I still own it. The Silo purchased from you in 1901 was the first Silo in that immediate neighborhood and is still in excellent condition. It has been satisfactory in every respect.

Yours very truly,

W. S. Throop.

Was the first Silo in that immediate neighborhood.

Meridian, N. Y., April 23, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—The Silo I bought from you in 1901 has been proven satisfactory in every way.

I wish to mention the durability of it as it is as sound to-day after 13 years of use as was when erected.

Yours truly,

Sound to-day after 13 years of use as when erected.

C. E. Dudley.

Antwerp, N. Y., April 27, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—We have used the Silo bought from you, since 1901, and we cannot see but what it appears in as good condition now as when first put up. We think that your Silos are the best that we know of and we have seen a good many kinds and none have stood the test any better.

Very truly yours,

A. J. Woodward.

In as good condition now as when first put up. Thinks that our Silos are the best.

Harborereek, Pa., May 1st, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—The Silo I purchased of you in September, 1901 has been in use every year since and is in perfect condition to-day. It was readily put up, three men completing it entirely, above the foundation, in three days.

This Silo has withstood three terrific wind storms, almost amounting to cyclones, where several others in this vicinity have blown down, and yet it stands perfectly rigid, without anchors, in a very exposed location. This is, in a great measure, due to the door construction, as your method keeps the Silo rigid at all times, full or empty. As to keeping qualities, it has always kept the silage perfectly.

Very respectfully,

Bert. Wildman.

Has withstood three terrific wind storms, others in this vicinity have blown down, due to the construction, our method keeps the Silo rigid at all times, full or empty.

Delhi, N. Y., May 10th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—The Silo I purchased in 1902 is still in use and so far I as can see is in good condition. It answers my purpose very well.

Very truly yours,

A. J. Nicoll.

Purchased in 1902, is still in use.

Salt Springville, April 27, 1914.

Dear Sirs:—Your letter received. We like the Silo (bought in 1902) alright. You can tell your friends the Silo is alright. We find no fault with it.

Your friend,

James Cramer.

Finds no fault with it.

Nutwood, O., April 22, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gents.—Yours of 18th received, in reply will say my Silo is still in use and as good as new. (Bought 1902.)

Am well satisfied with it. Don't see how some people get along without a Silo.

Yours truly,

C. B. Spencer.

Don't see how some people get along without a Silo.

Gardiner, N. Y., May 2nd, 1914.

Messrs. G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—I reply to yours of the 20th, will say that we are still using the Silo, (bought in 1902) and would not do without one. We were the first ones to build a Silo in this place, but most every farmer has one now. The lumber in ours is a better quality than any around here.

Respectfully yours,

J. McIntosh.

After 12 years is still using the Silo. Our lumber is better than others.

North Bingham, Pa., April 25, 1914.

G. Elias & Bro.

Dear Sirs:—The Silo (bought June 1902) in question is still in use and is good for many years more of service.

Yours truly,

O. A. Kibbe & Sons.

12 years in use and good for many years more of service.

Washington, Mills, N. Y., April 25th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Yours of the 23rd received and contents noted. The Silo (bought in 1902) you are inquiring about gave good satisfaction as long as I knew anything about it. It was on a farm occupied by my son at the time it was up but I do not own the farm now.

Yours truly,

Wm. Farrel.

Used for 12 years and gave good satisfaction. Still in use.

### HOPKINS BROS. FARM DAIRY.

Silver Springs, Md., April 21, 1914.

G. Elias & Bro.

Gentlemen:—In 1902 I put up for myself and neighbors, five of your Silos, three 14 x 30, two 12 x 24, which are in use to-day and in good shape.

There have been several home made Silos built here since I built mine, which have gone several years ago.

I recommend your Silos for the good keeping of Silage and long life.

Yours Respectfully,

Chas. Hopkins.

Home made Silos gone several years, while ours erected 2 years ago still in use. Recommends our Silos for the good keeping Silage and long life.

## HICKORY HILL FARM. W. B. DIEVENDORF, Prop.

Sprakns, N. Y., April 22, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—Your favor of 17th was received and in reply will say that the Silo which I purchased from you in 1902 has given me perfect satisfaction.

Yours very truly,

W. B. Dievendorf.

Purchased in 1902 has given me perfect satisfaction.

Chadwicks, N. Y., April 26, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—Your letter of the 22nd received and contents noted. In reply, will say the Silo shipped me in 1902 is still in use and is giving good satisfaction.

Yours very truly,

J. H. Collins.

Bought in 1902 is still in use and giving satisfaction.

New Market, N. J., April 20, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—The Silo I bought of you in 1903 has been in constant use ever since and seems to be as good as ever.

If I were on the market for another I would get another of your Silos.

Respectfully Yours,

F. O'Nelson,

In constant use for 11 years. Will buy ours if he ever needs another.

## MILTON FARM.

Byron, N. Y., April 24, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Received your letter to-day asking about our Silo.

It was built in July 1903 and it stands up as good as the day it was built.

We fill it every year right to the top and it is as good now as the day it was built.

If I hear of any of my neighbors speak of building a Silo I will recommend yours to them.

We have not done any repairs on the Silo since it was built. It has only been tightened once since we had it.

Jerry Flynn.

Have not done any repairs on the Silo since it was built in 1903.
As good as ever.

Cambridge, N. Y., April 24, 1914.

G. Elias & Bro.

Your letter of 22 at hand. The Silo bought of you in 1903 is still in fine condition, been in continual use every year, and as far as I can see is good for 10 more years.

Have kept it painted and properly treated inside. Cer-

tainly has been a great money saver.

H. S. Blackfair.

Certainly has been a great money saver.

10 years old and good for 10 more.

Cuba, N. Y., May 5th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—In reply to yours of the 22nd, would say that the Silo purchased from you in 1903, has given good satisfaction in every way. We have kept silage from one year to another in perfect condition. We feed the silage to five horses besides our cattle, thereby saving much high-priced grain.

E. R. Horley.

Feeds the silage to five horses besides cattle. Has kept silage in perfect condition for 11 years.

Syracuse, N. Y., April 25th, 1914. Gentlemen:—I sold my farm 2 years ago. The Silo, (bought in 1903) is in use and has been ever since I purchased it. I believe it is in as good condition to-day as when it was built.

Yours,

C. P. Remore.

Bought in 1903, in as good condition to-day as when it was built.

Ontario, N. Y., April 23, 1914.

G. Elias & Bro.

Your letter at hand and contents noted. In reply will say, that the Silo erected in 1903 is standing yet, am perfectly satisfied with it. I think it is a wonder.

Yours truly,

J. F. Rikir.

Erected in 1903. Is standing yet. Perfectly satisfactory.

North East, Pa., April 25th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—The Silo I got from you Sept. 30, 1904, is still in good condition. I have filled it nine times and from all appearances, it is good for twenty-five years more. My ensilage has kept fine. I saved the price of it the first year. I can recommend your Silo to any one wanting a Silo.

Yours truly,

Geo. Evans.

After 10 years of use, is good for 25 years more. Saved price of it first year.

Albion, N. Y., April 29, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Your favor of the 22nd at hand in regard to the Silo bought of you in 1904. I used it five years and then sold the farm. The Silo was satisfactory.

Yours truly,

J. H. Rodwell.

Silo was satisfactory.

#### CRYSTAL SPRINGS POULTRY COMPANY

RAISERS OF FAMOUS OIL CITY DUCKLINGS

Oil City, Pa., April 21, 1914.

Messers G. Elias & Bro., Buffalo, N. Y.

We have your letter of April 20 addressed to Mr. Brundred, with reference to our experience with your 10 x 20 Silo, which you furnished me in August 1904.

This Silo is still in use, and seemingly as good as when it was erected.

Yours truly,

Crystal Spring Poultry Co. H. D. Brown, Pres.

10 x 20 Silo furnished in August 1904. Is still in use and as good as when it was erected.

Oneida, N. Y., April 27, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Your Silo you sent me ten years ago is still standing and is all right. I would not know how to get along without it. It is a God-send to the stock as much as the pork barrel in the cellar is to the family. I would recommend you as an honest firm to deal with.

Yours truly,

Benj. Thorp.

Used 10 years and still good. Would not know how to get along without it.

Macedon, N. Y., May 6th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—The Silo you shipped me Aug. 4, 1904, is in perfect condition and satisfactory in every way.

Yours truly,

Darwin Eldredge.

In perfect condition after 10 years.

Sherwood, N. Y., April 22, 1914.

G. Elias & Bro., Buffalo, N. Y.

Messrs,—Replying to your letter concerning the Silo purchased from you ten years ago. I am glad to report that it has been a boon to the farm and is still in good repair.

Respectfully,

Emile Howland.

Has been a boon to the farm for 10 years and still good.

Union Hill, N. Y., April 25th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Yours of the 18th at hand and in reply to it. My Silo, (bought in 1904) is still in use and will be for the next 5 or 6 generations. Cannot have a picture of my Silo as it is inside,

Yours truly,

Joseph La Frois.

Still in use and will be for the next 5 or 6 generations.

Nineveh, N. Y., May 7th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs;—Your Silo stands as well as when built in 1905, giving me no trouble whatever, and keeps ensilage in the best of condition.

Yours very truly,

Chas. F. Waterman.

Stands as good as when built in 1905. Keeps ensilage in the best of condition.

North East, Pa., May 4, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs,—The Silo I bought from you in 1905 is still in use It went together in good shape. There is no way corn will go so far, as when it is put in a Silo and it will do the cows more good.

Respectfully yours,

A. H. Waterman.

There is no way corn will go so far, as when it is put in a Silo.

Colden, N. Y., April 25th, 1914.

Gentlemen;—In reply to yours of the 22nd inst. Am pleased to say that the Silo I purchased from you 7 years ago is now in perfect condition and has given entire satisfaction.

It was very simple and easy to erect. We did it ourselves, without extra help. We could not help doing a good job, as every door, hoop and fixture fitted with such exact nicety that when we finished, the Silo appeared more like the handiwork of experts than that of inexperienced help.

It has never given us the least trouble and not one cent expense for any repair, and from its present appearance, I do not think it will for the next 8 years to come.

Wm. S. Shelley.

After 7 years in perfect condition; gives entire satisfaction. No trouble. No expense. Easy to erect. Good for 8 years more.

Nutwood, O., April 27, 1914.

G. Elias & Bro.,

Gentlemen,—I am sorry I cannot give you a picture of the Silo. I had two Silos and filled them for seven years, I then sold them having sold my herd of cows. The Silos are in good condition and are in use yet to-day. They were what you sold them for, and it is the only way to keep cows profitable. I have another herd of 26 started and am either going to have a sale this fall or going to buy another Silo. I had no trouble in keeping the feed always No. 1 and no trouble in setting it up or taking it down.

Respectfully,

C. H. Garrniger.

In use 7 years. No trouble in keeping feed. Will buy another this Fall.

Rochester, N. Y., April 26, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—Your letter at hand regarding Silo I purchased from you. I erected it myself about 7 or 8 years ago and filled the Silo 3 years when I sold my farm. My experience with it is, O-K in every way. With my two men, we raised this 10 x 30 ft. Silo in one day and it went together like a book.

Yours very truly,

J. M. Gould.

It went to-gether like a book.

G. W. FRENCH

DRY GOODS AND GROCERIES
AND A FULL ASSORTMENT OF GENERAL MERCHANDISE.

Colden, N. Y., April 23, 1914.

G. Elias & Bro.

Gentlemen:—The Silo we bought of you in August 1907 is still in use giving grand satisfaction. It is no trouble to set them up. They go together easy and I can say they are the best Silos I know of for that amount of money.

Yours truly, FRENCH BROS.

by Geo. French.

It is no trouble to set them up. Best Silo for the money.

Lockport, N. Y., April 29, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—In reply to your letter received on April 22nd, with regard to the 10 x 24 Silo you shipped me in the year of 1907, would say that I still use it every year and am well satisfied with it.

Yours respectfully,

Lawrence F. Linik.

Shipped in 1907, still use it every year, and am well satisfied with it.

## W. H. GARDNER, Prop.

Hoosick, N. Y., April 24, 1914.

G. Elias & Bro.

Gents:—In regard to the Silo, it is still in use and all right, stands erect and sound.

I have sold the farm and I am not farming now, but would say the Silo is all right and I would not farm without one.

Yours truly,

William H. Gardner.

Would not farm without one.

Medina, N. Y., May 5th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—The Silo I bought of you in 1907 is just as good as new and I think it will last a life time if it is kept painted and the hoops tight. I am very much pleased with it and I think that every farmer should have a Silo.

Yours truly,

John P. Baehr.

After 7 years is just as good as new, and I think it will last a life-time.

Auburn, N. Y., April 25, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Our Silo purchased from you seven years ago, shows no signs of decay and stands perfectly true in every way. We have always kept the hoops tight and never leave ensilage above the wall after about May 15th.

Yours very truly,

W. H. Depew.

Shows no signs of decay and stands perfectly true after 7 years.

Skaneateles, N. Y. April 22, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—The Silo you sent me in 1908 is as far as I can see as good as new.

The Staves are sound and hard and keep Silage in perfect shape.

Yours truly,

John Tucker.

Staves are sound and hard and keep Silage in perfect shape after 6 years use.

Sharon, Mercer County, N. Y., May 5, 1914. G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—The Silo I bought from you five years ago is still standing and has been filled five times and is in as good shape now as it was first time it was filled. Keeping the silage very satisfactorily.

I put up the Silo I bought from you on a rented farm, and sold it to the owner of the farm.

Since I have bought a farm of my own and put up a tile Silo, but my reasons were because they are everlasting and fire proof.

As to my experience with the keeping of silage I prefer the tub (Stave Silo) and also the tile costs so much. You can buy two tubs (Stave Silo) for the cost of one tile.

Yours truly,

D. E. Stambaugh.

In as good shape now as it was first time it was filled.

Verona, N. Y., May 2nd, 1914.

Messrs. Elias & Bro., Buffalo, N. Y.

Gentlemen:—The Silo I purchased from you 6 years ago is still with me. I had no trouble in putting it up and from all appearances, is as good as when first erected. The material was good and it stands well. I have filled it every year and the ensilage keeps good. I feel I have obtained great benefit from it. Do not know of any way it could be improved. It has given the very best satisfaction.

Yours very truly,

G. Williams Gardner.

Do not know of any way it could be improved.

Deerfield, O., May 11, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—In answer to your request, will say the Silo received from your firm in 1909 is still in use and looks as though it will last for a good many years yet. It has given perfect satisfaction in every way and think it is one of the best Silos on the market.

Yours respectfully,

O. P. Mowen.

Looks as thought it would last for a good many years yet.

Avondale, Pa., May 5th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—Your letter of inquiry received, concerning the Silo secured from your firm in Sept. 1910. Upon inquiry from my son-in-law who occupies the farm where the Silo was erected, I do not learn of any trouble that has been experienced with the structure, nor do I learn of any criticism in relation to the keeping of the ensilage. It is the impression from information received that for the same investment it is able to maintain its place as a competitor on the market.

Very truly,

Augustus Brosius.

From information received that for the same investment it is able to maintain its place as a competitor on the market.

Springboro, N. Y., May 8, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—I will answer your letter in regard to the Silo I purchased from you. I used it three times and it was satisfactory, but it was too large for me. It was an extra good article, and the workmanship on it could not be beat.

Yours truly,

Ray Hotchkiss.

An extra good article, and the workmanship on it could not be beat.

## MEADOWLAND FARM FRANK HITCHCOCK.

Canaan, Conn., April 25, 1914.

G. Elias & Bro., Buffalo, N. Y.

Yours of April 18th on hand. In reply would say the Silo bought of you July 29, 1910, is still is use and gives perfect satisfaction. We set the Silo up in a day (except the roof) with farm hands. (No expert helpers.) Silage keeps alright.

Gave it a coat of paint last Fall and tightened the

rods, nothing else has even been done to it.

Do not see why it will not last as long as I do.

Respectfully,

F. Hitchcock.

Set it up in a day. Do not see why it will not last as long as I do.

Elbridge, N. Y., May 4, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Your letter of the 24th is at hand and I will gladly acknowledge it. I have found that the Silo purchased from you in 1910 has proven satisfactory in every respect. The ensilage keeps very good in it, far better than it does in the pit. In my estimation, no progressive farmer should be without a first class Silo and I can recommend yours very highly. As for any suggestion, to make your Silo better, I think it is all right.

Very truly yours,

Fred Campbell.

No progressive farmer should be without. I can recommend yours very highly.

Mt. Upton, N. Y., April 20, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—I am pleased to say that the 14 x 26 Silo which I bought of you in July 1910 has been filled each year since and has given excellent satisfaction and is apparently in as good condition now as when first set up, and if kept painted and hoops tight, I see no reason why it will not give good service for twenty five years.

There are other good Silos, but I know of no better

make than yours.

Very truly yours,

Chas, G. Brooks.

See no reason why it will not give good service for twenty five years.

Castile, N. Y., April 28, 1914.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—I have your letter of inquiry regarding the Silos we bought of you in 1910. I am pleased indeed to say that they are as fine as any I have ever seen. They were 10 x 30 ft. with full length staves and continuous doors, and have been seen by a great many farmers who call at our farm and in all cases have been much admired. They are in perfect condition to-day, and we have always been glad to leave attached to them your advertisement, showing others where a really first class Silo be bought.

Yours truly,

II. L. Strivings.

Perfect condition. Admired by all.

Poughgnag, N. Y., April 25, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—In regard to the Silo I bought of you, it is in use and has been filled every year and keeps ensilage in good shape. The only regret is that I did not buy it sooner.

Yours truly,

F. D. Millard,

Regrets he did not buy sooner.

Fort Plain, N. Y., April 27, 1914.

Messrs, G. Elias & Bro.

Gentlemen:—The 14 x 27 ft. Yellow Pine Silo you shipped me in 1910 has been used every year since and has

been satisfactory in every respect.

Last August, it was blown down by a heavy North wind, caused by our neglecting to anchor, but nothing was broken except the curve plates and cross sticks supporting roof which were compelled to break when the structure fell together. We put it up just as easy and quick as we did the first time, repainted it and it now looks as good as any Silo in the place.

Yours very truly,

Sylvander Nellis.

After being blown down, was re-erected as good as new without loss.

Rochester, N. Y., April 28, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Yours of the 23rd at hand, would say, the Silo purchased of you several years ago is just as good as ever as far as I can see. It has been in constant use and stands up fine. Tighten the hoops once in awhile and keep it painted and it will last for years. There were several other parties near me who purchased of another party the same season and theirs are down a good while ago. All I can say is, it was O-K in every respect.

Yours truly,

Warren F. Clark.

Been in constant use, and will last for many more years, while others are down and out.

Burghill, Ohio, May 2nd, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs.—The 12 x 30 Silo purchased of you in the Fall of 1911 is in use and will say that it has saved me a good many dollars of feed bill as I only have 26 acres of land and have kept as high as 13 head of cows and 4 head of horses on this small place.

Yours truly,

D. De Forrest.

26 acres of land and have kept
13 head of cows and 4 head of horses.

Homer, N. Y., April 26, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs;—In reply to your inquiry, I will state that the Silo I purchased of you in 1911 is satisfactory in every way. We had no trouble in erecting, every part and piece was perfect. From my experience I could not suggest any changes. Let well enough alone. So many farmers do not properly erect their Silos, and then never give it any attention afterwards and it soon goes to pieces. When your Silos are properly put up, and the hoops kept tight, they are absolutely air-tight when filled, and the ensilage will be good from top to the bottom.

I will have a photograph taken soon and mail you one. If I can get a picture that will show up the barn and Silo as it is, it will be as valuable as any you can get.

Very respectfully,

L. A. Stafford.

Perfectly air tight.
Ensilage good from top to bottom.

Lancaster, N. Y., April 24, 1914.

G. Elias & Bro.

Dear Sirs:—I received the letter addressed to E. E. Chapman which was recently sent to him by you.

E. E. Chapman is dead and as I am his Son I receive his mail.

The Silo which he got of you in 1911 is still in use. The farm on which it stands has been sold.

Yours Respectfully,

H. E. Chapman.

Still in use.

Jordan, N. Y., April 25th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs;—Yours of the 22nd at hand. Would say my Silo, (bought in 1911) has given satisfaction. I don't think I could suggest any improvements.

Respectfully yours,

J. P. Watts.

Could suggest no improvements.

Sanborn, N. Y., December 19, 1913.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—I have sold my farm and dairy but will say, the Silo is better today than some new ones they are putting up, (thats what the man says that bought the place,) he put up a new one last year.

Yours truly.

John A. Quester.

Silo is better to-day than some others they are putting up.

Canojaharie, N. Y., April 26, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—On the 24th inst. I received a letter from you asking about the 16 x 24 ft. Silo purchased from you

three years ago.

I erected the Silo in the fall of 1912. The silage keeps good in it and I like the door construction first rate, as the doors are very easy to remove. The staves are made out of best seasoned Yellow Pine. The hoops are made of good material and the Silo pleases me well, being equal to any Silo in this vicinity.

Yours very truly,

Adam Fettinger.

Likes the door construction.

Derby, N. Y.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—In September, 1912, I purchased a Silo from you which has been used two seasons with great success. Last year our corn was badly hurt from the frost and some thought it would not keep in the Silo. I cut and filled each day with-out letting the corn lie on the ground and no water was used. I have just finished feeding the bottom tier and to my satisfaction can say that the silage has been in fine shape all Winter, practically no waste. Will put up a larger Silo this year.

Yours very truly,

Frank C. Trubee.

Silage has been in fine shape all Winter. No waste. Will put up a larger Silo this year. Kinsman, O., April 23, 1914.

G. Elias & Bro.

Your letter of April 18 at hand. I will say D. F. Hobart has gone on a trip and will not return for a few weeks.

I will say this in regard to his Silo, it was satisfactory in every way, well pleased with it. When he returns he can write you.

This is D. F. Hobarts Mother.

Was satisfactory in every way.

Boyce Station, May 20th, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—In reply to your letter of April 18th, will say that we went out of the dairy business a short time after we put up the Silo that you refer to. I have helped fill several of your Silos and for my part, I could not mention any improvement to be made. If I was buying a Silo to-day, it would be one of yours.

Yours truly,

H. B. Boyce.

If I was buying a Silo to-day, it would be one of yours.

Dover Plains, June 8th, 1914. G. Elias & Bro., Buffalo, N. Y.

Yours of April 22 has just been brought to my attention. Owing to a misplacement of your letter I over-looked it.

The Silo bought of you three years ago is giving me entire satisfaction; it is absolutely air tight, which keeps the Silage in perfect shape.

It went to-gether without a hitch and stands to-day after 3 years of service exactly plumb. No guy wires needed.

Respectfully yours,

Thos. J. McGraw.

It is absolutely air-tight. It went to-gether without a hitch. Stands to-day after 3 years of service, exactly plumb. No guy wires needed.

Weedsport, N. Y., May 3rd, 1914.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—Received your letter of the 18th of April. The Silo that I purchased from you in 1912 has given entire satisfaction and I cannot suggest any changes that would improve it in any way.

Sincerely, William Lawler.

Has given entire satisfaction.



Selecting the logs from which the Silo Staves are cut.

Pulaski, N. Y., February 22, 1907.

G. Elias & Bro., Buffalo, N. Y.

Has been using our Silo since 1900 with great satisfaction.

Gents:—We are still using your two Silos, purchased in 1900 and 1901, with great satisfaction. We are keeping about forty head of cows and young stock on a farm of less than one hundred acres, and our father was unable to keep more than one third of this number with old styles of farming.

The Silos keep the ensilage perfect. We milked about twenty cows during December and January just past and received \$124.04 for the milk for December and \$119.00 for the milk for January, besides what was used in the family and quite a little for what we sold to neighbors. We sent the milk to a cream shipping and skim cheese factory. We know of farmers hereabout who have no Silos who were bringing less than fifty pounds of milk per day to the factory when we were getting two hundred and fifty pounds, and their dairies were nearly twice as large as ours. The grain costs about forty per cent of the gross returns from our cows. We feed cotton seed, linseed oil meal and distillery grains.

Farmers are very foolish to keep putting off building a Silo. Winter dairying is the thing now for New York State. It pays to grain in the winter, especially in the fore part of the winter. It keeps the animals in good condition, you more than pay for the feed fed to them, the good feeding keeps the lice off, they come out in the spring in good condition and don't have to wait till midsummer before they are in condition to fill the pail. Many cows are just kept alive through the winter, and it takes them until fly time to recuperate and then the flies eat them up, and what does the dairyman get? Practically nothing for his year's work.

If one goes into winter dairying, and feeding ensilage everything must be in conformity. You must study feeds and feeding, have your barn warm and have water in the barn. We put in a water system in our barn last winter that cost us but \$50.00, and it will pay its original cost every year. It was simply a gravity system from a well higher up. All we have to do is to turn a faucet and the water runs into a trough in front of the cows. Cows must be well watered in order to produce great results in milk.

Wishing you continued success, I am

Yours very truly,

L. J. FARMER.

Messrs. G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—In reply to your letter of recent date, I am pleased to say the Silo purchased of you in 1896 is still in use and looks as though it would be for many years yet.

The good quality of the lumber and the close fitting Close fitting Staves matching and beveling, so that both sides are tight, very apparent to me to have much to do with the durability of a Silo. In that respect, I am very frank to say the Silo we purchased of you is as good as any

I ever see of the single stave Silos. Only trouble it is The only trouble with my Silo at the present is that it is too small for the size of my dairy, but I have a neighbor that is starting a small dairy and he wants to buy it, providing I decide to erect a larger one. He will give me what it cost in '96, (aside from labor) but I think it is worth more.

> Very respectfully yours, CHARLES D. WELLER.

April 8, 1912.

After three years use concludes there is no better Silo made.

Sixteen years and

good for many

Good as any he

years yet.

ever saw.

too small.

As good as when put up.

Has not shrunk a particle.

Keeps ensilage perfect.

VERNON, N. Y., March 5, 1907.

Messrs. G. Elias & Bro., Buffalo, N. Y. Gentlemen:—Yours of Feb. 26th received. In regard to Silo I bought of you in 1903, would say I received it in good condition and was well pleased with it. I think there is no better Silo made. It is as good today as the day it was put up. It has not shrunk a particle and it keeps ensilage perfect.

I am unable to say just what it cost to build it as I had other carpenter work done at the same time. I filled it last year from about seven acres of corn.

I see by your figures it holds ninety and one-half tons. My method of feeding is twenty pounds to feed twice a day. I know one can keep more cows on the same number of acres by raising corn and putting it in the Silo than any other way.

> Yours truly, THOS. DAPSON.

After nine years. Received in good condition. No better Silo made. As good today as when erected.

Purchased the best.

VERNON, N. Y., April 10, 1912. G. Elias & Bro., Buffalo, N. Y. Dear Sirs:—The Silo I bought of you in 1903, received in good condition, was well pleased with it.

I think there is no better Silo made; have never had to tighten the hoops but a very little. It is as good today as when I put it up. It keeps the ensilage perfect.

I would advise anyone putting up a Silo to purchase the best. The best is generally the cheapest in the end.

Yours truly,

THOS. DAPSON.

Foolish to put off building a Silo.

STOCKTON, N. Y., May 14, 1912.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen;-The Silo which I bought of you Aug., 9th, 1902, still stands as straight as when it was erectcontinuous service. ed. I have not ever been sorry that I invested \$300.00 in building it.

34 head of stock with very little hay.

After 10 years

Last year it came in pretty handy I can assure you. Hay was very light and I had corn enough to more One 16x30 winters than fill it from which I wintered 32 Head of Cattle and one span of Horses with very little hay, until March, at which time I began feeding grain and more hay. My cows came out looking good and I ever recommend the Silo as a big help to any farmer. Respectfully,

WM. S. KENT.

ROCHESTER, N. Y., March 28, 1912.

After ten years.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:-I return your clipping with slight correction. Do not think I can add anything that would be of benefit to you.

> Yours truly, C. S. CRITTENDEN.

Webster, N. Y., March 1, 1907.

Continues to do excellent work.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:-The 12 x 26 Silo I purchased from you some time ago still continues to do excellent execution in the preserving of fodder. On an average we put in about six acres of corn and no part of that spoils in the least in the Silo, and carried twelve cows from Nov. 1st to April 1st with no other feed and the twelve cows were good beef in the spring. I fed twelve cows more on dry feed in the same barn and under same condi-After eight years. tions excepting the ensilage and they came out in April in not one-half as good condition as those fed on ensilage.

Very truly yours, G. I. ELDREDGE. PORT BYRON, N. Y., March 20, 1907.

G. Elias & Bro., Buffalo, N. Y.

After three years' use decides our Silo is the most money-making contrivance a farmer can have.

Recommends our Silo.

Dear Sirs:—I have used one of your Silos for the past three years and it has proven satisfactory in every respect. Most of the Silos in this locality are broken stave made, which to my estimation does not prove very durable. My Silo seems to stand equal, in one sense better, than any Silo in this locality. It is 24 ft. high and 11 ft. in diameter. I have also 10 ft. of basement which I plastered after making the wall. The Silo is the most money-saving contrivance that a farmer can have. I keep a dairy of twenty milk cows, which I can feed the required season on twelve to fifteen acres of silage corn.

I recommend your Silo as the most durable and cheapest, in a sense, and most easily constructed Silo on the market.

Yours truly,

J. FLYNN.

PORT BYRON, N. Y., March 27, 1912.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—I have used one of your Silos for the past eight years and it has proven satisfactory in After eight years. every respect.

Most of the Silos in this locality are broken-stave made, which to my estimation does not prove very Better than any durable. My Silo seems to stand equal, in one sense Silo in this locality. better, than any Silo in this locality.

> It is twenty-four feet high and sixteen feet in diameter. I have also ten feet of basement which I plastered after making the wall.

The Silo is the most money-saving contrivance a Most money farmer can have. I keep a dairy of twenty milk cows making contriwhich I can feed the required season on twelve to vance a farmer can fifteen acres of silage corn. have.

Most easily constructed of any on market.

I highly recommend your Silo as the most durable and cheapest, in a sense, and most easily constructed Silo on the market, and if I wanted another Silo I would build no other kind.

Yours truly,

J. FLYNN.

Sanborn, N. Y., February 25, 1907.

Pulaski, N. Y., March 26, 1912. G. Elias & Bro., Buffalo, N. Y.

Gents:-We are still very enthusiastic over the Silo and its possibilities. We do not see how an up-to-date grew enough corn dairyman can do without one.

The cows are always healthier, have their calves better and produce in a few years as much as they used to produce in twice the number of years by the old

Kept 25 head Oct. methods. In 1911 we grew enough corn on six acres to fill two Silos, 14 x 24 foot, and the ensilage kept twenty-A Godsend to five head of cattle from October to May. I do not think anything in the dairying line has been such a Godsend

to the farmer as has been the discovery and practical use of the Silo.

Yours very truly, L. T. FARMER.

HARRISBURG, PA., March 4, 1907.

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:-Your letter of the 26th ult. came duly to hand. I received a Silo from you in the fall of 1902 and filled it that fall. I have been using it ever since, with very satisfactory results. I am using it on my farm in Springfield, Erie Co., Pa. It came in good condition and was erected in one day with little expense. I cannot now give you the details as to the acreage required to fill it or the tonnage of the same. My man feeds the ensilage twice a day, morning and night, and feeds hay or other dry feed at noon. I would not know how to get along without it.

Very respectfully, À. E. ŠÍSSON.

March 26, 1912

G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—In reply to your letter of the 25th inst. I will say that I received a Silo from you in the fall of 1902 and filled it that fall. I have been using it ever since on my farm in Springfield, Erie Co., Pa., with very satisfactory results.

Since I purchased that one of you I have purchased another from a nearby firm and now am using both

Silos.

I wintered fifty head of cows (some of which are milking) and young cattle, and fed them chiefly from these Silos and have ensilage sufficient to last into the summer. I value the Silos very highly and would not think of getting along without them so long as I keep cattle on my farm.

> Very respectfully, A. E. ŠÍSSON.

G. Elias & Bro., Buffalo, N. Y.

Eight years in use and all right yet.

Gentlemen:—Yours of the 20th on hand and in reply would say that the Silo I bought of you in 1899 is all right yet. I have used it every year and it has done good service. I have had no ensilage spoil except on top. If I was to do without it, it would be hard work to winter my stock, as there is no waste to ensilage if properly put in; everything that goes into the Silo is eaten, nothing left to take out of the mangers at morning.

The best in the neighborhood.

The carpenter that put up my Silo says mine is the best in the neighborhood, free of knots and well gotten up. It needs painting now again, otherwise I consider it as good as ever.

> Yours truly, JOHN A. QUESTER.

Sanborn, N. Y., March 27, 1912.

G. Elias & Bro., Buffalo, N. Y.

After thirteen years.

Painted twice and as good as ever.

Would not sell today at price paid for it.

Everything that goes in Silo is eaten.

Best in neighborhood.

Will last thirteen years longer.

Gentlemen:-In the Fall of 1899, I bought a Silo of you, have used it every year since I had it. It has been painted twice and I dare say it is as good as ever. I would not take today what I paid for it. I have filled it 13 Falls and have had nothing spoil in it yet; everything that goes into the Silo is eaten.

If in the spring of the year the Silo gets empty, the cows decrease on the milk right away. Even hay will not produce the flow of milk that ensilage will.

I think that a Silo will pay for itself in two or three years as everything that goes into the Silo is eaten; nothing to be taken out of the mangers in the morning.

The carpenter that put up my Silo said mine is the best in the neighborhood; free of knots and well gotten up. It is elevated one foot above the ground so it is always dry and I can see no decay on it yet. I think it will last 13 years longer.

> Yours truly, JOHN A. QUESTER.

After ten years.

Has been using

for five years

with very

results.

satisfactory

After twelve years

in 6 acres to fill

2 14 X 24 Silos.

to May.

Farmer.

Wintered 50 head.

Sodus, N. Y., March 2, 1907.

Messrs. G. Elias & Bro., Buffalo, N. Y.

Put it up in one day.

Gentlemen:—I received your letter Feb. 28th inquiring about my Silo. It was in good condition. My brother, son and myself put it up and put the hoops on in one day; I put it up inside of the barn. We sawed the doors out in rainy weather. I bolted the cleats on instead of nailing them, and the doors are so good that if the cleats were off you could hardly tell where they were.

Good doors.

I think it takes about four acres to fill it. The first two years my corn did not come up good on account of dry weather, and the third year the grubs hurt my corn after it was too late to plant in. This last year I filled it rounding full; I filled it the 18th of September and commenced feeding three days later. It is nearly half full now and I am feeding seven head. I feed twice a day and once in a while three times. I do not know how much it holds, because I never counted how many loads it takes to fill it.

It is hardly possible for me to tell the saving by using, but I think I can keep nearly double the stock that I could without it. I have one farrow cow, have sold three calves and have two more nearly old enough to sell.

Can keep double the stock.

The calves and the butter that I have sold since the first of November have brought me over \$65.00, besides what milk and butter we used in the house. I can see that I am getting more and larger straw since I have had the Silo.

The last two years are the first in a number of years but what I could get all of the straw in the barn.

Yours truly,

S. H. ALLEN.

Sodus, N. Y., April 9, 1912.

G. Elias & Bro., Buffalo, N. Y.

Dear Sirs:—A short time ago I received a letter from you asking for a new testimonial from me about Silos. I don't know as I can say much more than I said in the other except the following:

No sign of decay.

After nine years.

I don't see any signs of decay as yet; the doors fit as good as when first built. In 1908, I filled it with three acres of corn.

Yours truly,

S. H. ALLEN.

HILLCREST DAIRY FARM

Bennington, Vt., March 11, 1907.

G. Elias & Bro., Buffalo, N. Y.

No practical dairy man should be without a Silo.

Gentlemen:—In reply to your letter of recent date would say that both Silos bought of you are giving excellent satisfaction. As to cost of erecting could not say as we did most of the work ourselves. We fail to see how any practical dairyman can be without a good supply of good ensilage, when Silos can be obtained that are as easily erected as the Buffalo.

Very truly yours,

RICE BROS.

P. S. Please send prices and description of Silos to Wm. C. Robinson, Bennington, Vt. He is going to buy one this summer.

Bennington, Vt., March 27, 1912.

G. Elias & Bro., Buffalo, N. Y.

After nine years.

Good as new. No repairs have been made on them.

Eleven years in

use and still in

good condition.

Lumber good

fitting.

ever saw.

quality and close

As good as he

Gentlemen:—In reply to yours of the 25th inst. can only add to our testimonial of March 11, 1907, that both Silos are in good condition and keep ensilage as well as when new, no repairs having been made on them.

Yours truly,

RICE BROS.

WADSWORTH, N. Y., March 11, 1907.

Messrs. G. Elias & Bro., Buffalo, N. Y.

Gentlemen:—Your letter of Feb. 20th has just reached me having been missent. In reply to the same I am very pleased to say the Silo purchased of you in 1896 is still in use and in good condition and looks as though it would be for many years yet.

The good quality of the lumber and the close fitting, matching, and beveling, so that both sides are tight, is very apparent to me to have much to do with the durability of a Silo. In that respect I am frank to say the Silo we purchased of you is as good as any I ever see of the single stave Silos.

Very respectfully, CHAS. D. WELLER. If you are going to build a House or a Barn, send us your list of materials wanted.



If it is
Lumber,
or made of
Lumber,
we make it.



G. ELIAS & BRO. Inc.

965 Elk Street,

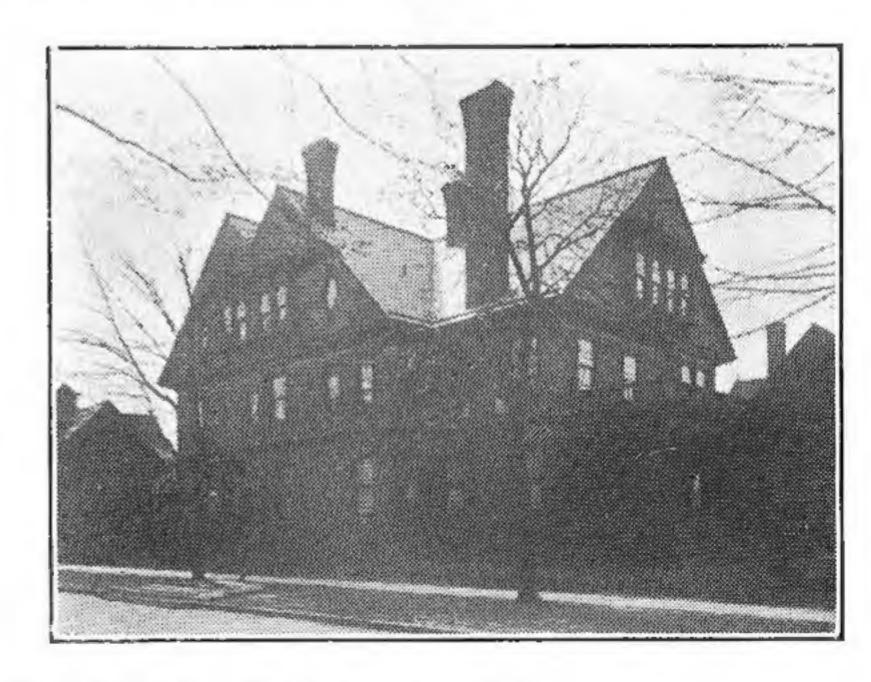
BUFFALO, N. Y.

HEADQUARTERS FOR

TIMBER, LUMBER, MILL WORK and SILOS



The Elias
Silo
is the
Silo
you can
depend on.

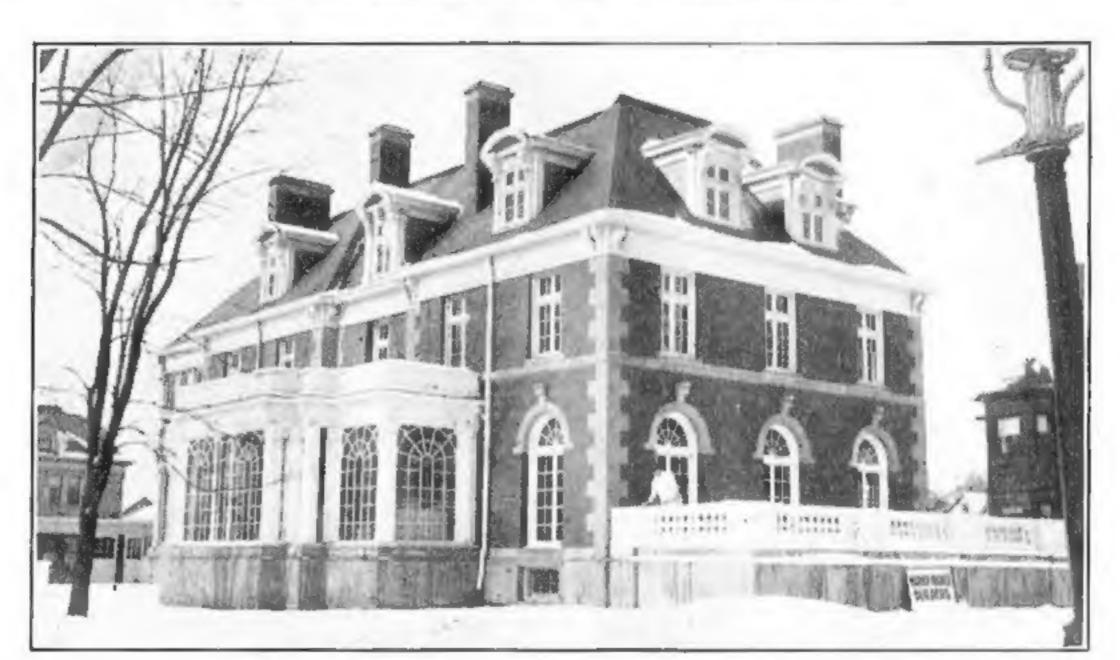


A few of the thousands of houses for which we furnished all the material.

We furnish everything in the line of Wood entering into the construction of any kind of House, Barn, or other structure, from foundation to the roof.

TINBER

Not the house that "Jack" built, but one of the many classy houses, everything for which in line of wood, inside and out, furnished by G. Elias & Bro. Inc.



When high class Wood Work is wanted, G. ELIAS & BRO. Inc. Supply it. LUMBER

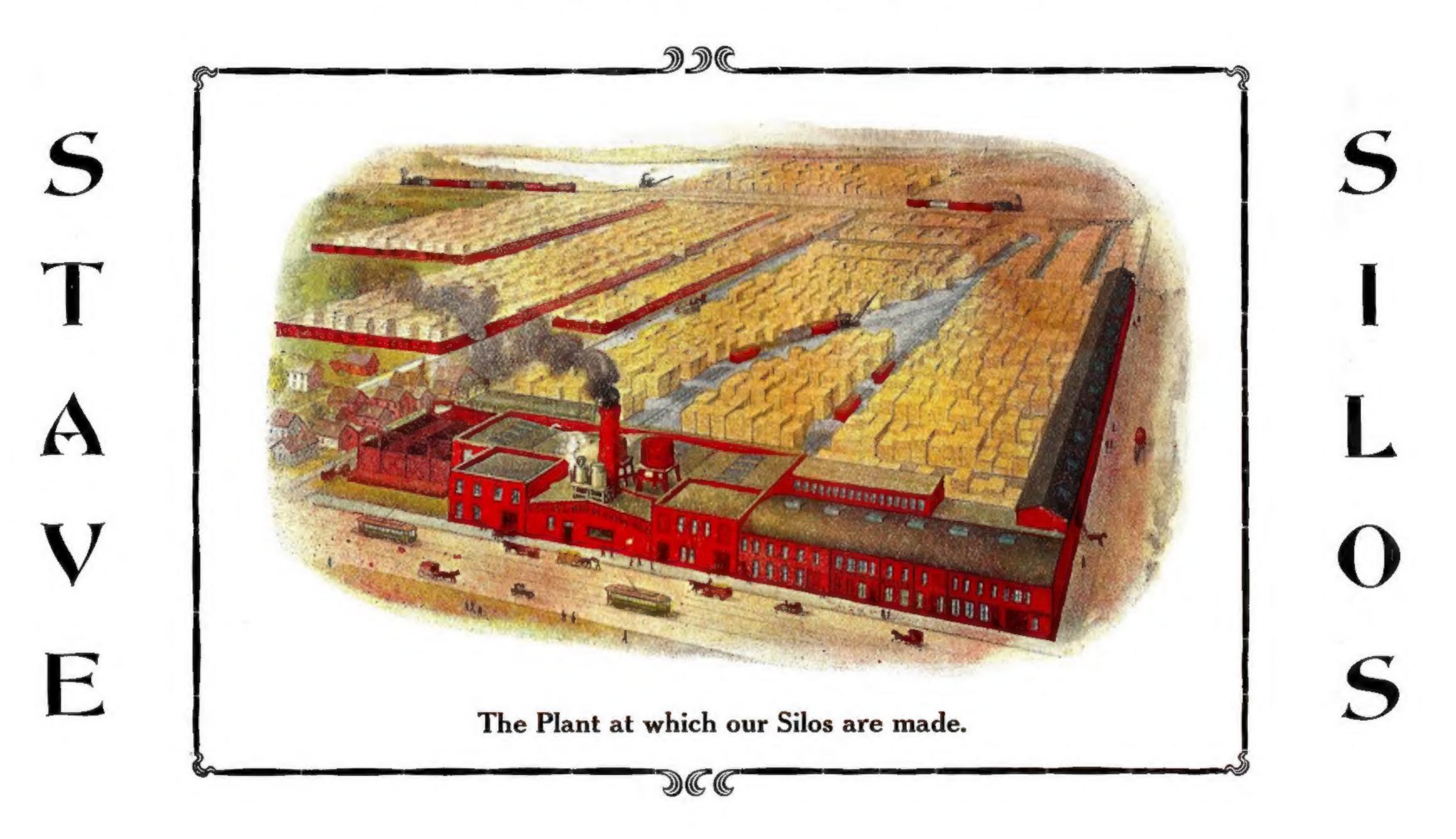
WE ARE ALWAYS IN THE MARKET FOR LOGS, TIMBER AND LUMBER, AND IF YOU HAVE A PIECE OF WOODS YOU WANT TO LUMBER, WRITE US ABOUT IT.

G. ELIAS & BRO. INC.

ESTABLISHED 1881

BUFFALO, N. Y.

## G. Elias & Bro. Inc.



Buffalo, N. Y.